

# Integrated Health Systems Strengthening and Service Delivery (IHSS-SD) Activity



USAID Cooperative Agreement: No. AID-391-A-17-00002

Annual Report

October 1, 2020–September 30, 2021

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**Cover photo:**

Photo: The picture was taken during the energy backup system installation at district disease surveillance and response unit (DDSRU) in Balochistan. September 2021

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## Acronyms

AOR	Agreement Officer Representative
BMU	basic management unit
CCC	command and control center
CMCH	Chandka Medical College Hospital
COE	center of excellence
COVID-19	Corona Virus Disease-2019
DDSRU	district disease surveillance and response unit
DGHSS	Director General Health Services Sindh
DHIS	district health information system
DHO	District Health Office
DHQH	District Headquarters Hospital
DHS	Directorate of Health Services
DOH	Department of Health
DHPMT	District Health and Population Management Team
DR-TB	drug-resistant tuberculosis
DS-TB	drug-sensitive tuberculosis
EDF	Environmental Documentation Form
FE&DSD	Effective Field Epidemiology & Disease Surveillance Division
FY	financial year
GHSA	Global Health Security Agenda
HBC	home based care
HSS	health system strengthening
HPSIU	Health Planning, System Strengthening, and Information Analysis Unit
ICU	intensive care unit
IDSR	integrated disease surveillance and response
IHR	international health regulations
IHRA	Islamabad Healthcare Regulatory Authority
IHSS-SD Activity	Integrated Health Systems Strengthening and Service Delivery Activity
IMNCI	Integrated Management of Newborn and Child Illnesses
IPC	infection prevention and control
IYCF	infant and young child feeding
JSI	John Snow International, Inc.
KP	Khyber Pakhtunkhwa
KPI	key performance indicator
LHV	lady health visitor
LHW	lady health worker
LHS	lady health supervisor
M&S	monitoring & supervisory
MHSU	mobile health service unit
MNCH	maternal, newborn, and child health
MoNHSR&C	Ministry of National Health Services, Regulations and Coordination
MSDS	minimum service delivery standards
MSPH	master of science in public health
NGO	nongovernmental organizations
NHV	National Health Vision

NIH	National Institutes of Health
PC-1	Planning Commission proforma 1
PDSRU	Provincial Disease Surveillance and Response Unit
PHKH	Pakistan Health Knowledge Hub
PHSA	Provincial Health Service Academy
PMDT	Programmatic Management of Drug Resistant Tuberculosis
POE	point of entry
PPE	personal protective equipment
QI	quality improvement
RFM	regional field manager
RRT	rapid response team
RSPN	Rural Support Program Network
SOP	standard operating procedure
TB	tuberculosis
THQH	Tehsil Headquarters Hospital
TOR	terms of reference
UHC	universal health coverage
USAID	United States Agency for International Development
VTM	viral transport medium
WHO	World Health Organization

## Executive Summary

As the Integrated Health Systems Strengthening and Service Delivery (IHSS-SD) Activity began its third year of program implementation during the challenges of COVID-19, it maintained project activities in the four selected districts of Khyber Pakhtunkhwa province and two districts in Sindh province. COVID-19 support efforts were provided throughout the country.

Under the Global Health Security Agenda, COVID-19 and tuberculosis (TB) activities were implemented. COVID-19 support included infrastructure strengthening (energy backup, IT, and connectivity support), capacity building in disease surveillance, and human resource development. The command and control centers (CCC) used for COVID-19 monitoring were established in all six provinces. These CCCs—with Provincial Disease Surveillance & Response Units (PDSRUs) and district disease surveillance and response units (DDSRUs)—became the primary backbone for the integrated disease surveillance and response system in the country. Training on *infection prevention and control* were conducted for hospital staff and *home based care* for community-based staff located throughout the country. IHSS-SD also trained health care personnel on *COVID-19 case management* and *management of COVID-19 patients in intensive care units*. USAID's support enabled two batches of 69 mid-career managers from Punjab and Balochistan health departments to enroll in a master of science in public health (MSPH) degree program. IHSS-SD Activity also complemented the Government of Pakistan's (GoP) efforts to reduce vaccine distribution inequities by increasing access to COVID-19 vaccines in three Khyber Pakhtunkhwa (KP) districts, through outreach health services delivered via mobile health service units.

Support to provincial TB programs in Sindh and KP included active contact tracing and identifying drug sensitive and drug resistant cases of TB. IHSS-SD teams raised awareness among communities on TB prevention and effective treatment options. Teams counseled suspected cases to undertake diagnostic testing and, if confirmed, register for treatment at the nearest public health facility. This initiative demonstrated the value of community engagement and mobilization activities for better TB results and outcomes. IHSS-SD is also providing infrastructure improvement support to the Programmatic Management of Drug Resistant Tuberculosis (PMDT) sites, diagnostic equipment, and capacity building of program staff.

In addition to COVID-19 work, IHSS-SD Activity continued implementing its pre-COVID-19 work plan. The Activity supported work at the federal level by working with the National Institutes of Health (NIH) on strengthening its capacity to comply with International Health Regulations. The District Health and Population Management Teams (DHPMT) meetings were convened quarterly in Swat, Charsadda, and Lakki Marwat to discuss local challenges/issues in the health system and to identify cost-effective solutions and optimize resources.

In KP province, the monitoring & supervisory (M&S) system—a health worker performance management system—was further strengthened by building capacity of program managers to prepare field plans, visit the health facilities, and report on the quality of data received at the provincial level. Similarly, the lady health worker (LHW) program was provided technical support to improve the LHW Medical Information System. At the request of the Department of Health (DOH) KP, the integrated MIS dashboard was finalized and launched online, including key performance indicators. This transparency will help legitimize district rankings and incentivize and motivate districts and health care workers to deliver quality services. This initiative will provide mentoring to field staff for timely, complete, and accurate reporting. To improve the quality of maternal, newborn, and child health (MNCH) services, the quality improvement (QI) component along with supportive supervision was rolled out to provide short refresher trainings to the health personnel already trained under the IHSS-SD Activity. Finally, civic engagement activities continued. Health awareness sessions held with communities and handwashing sessions with primary school children continued and were monitored in three selected districts of KP.

During PY3, the COVID-19 periodic lockdowns, other restrictions, and the government’s vaccination campaigns affected the pace of IHSS-SD activities, and interrupted activity implementation timelines. However, soon after the COVID-19 lockdown was officially lifted, the activity resumed implementation to achieve all performance targets.

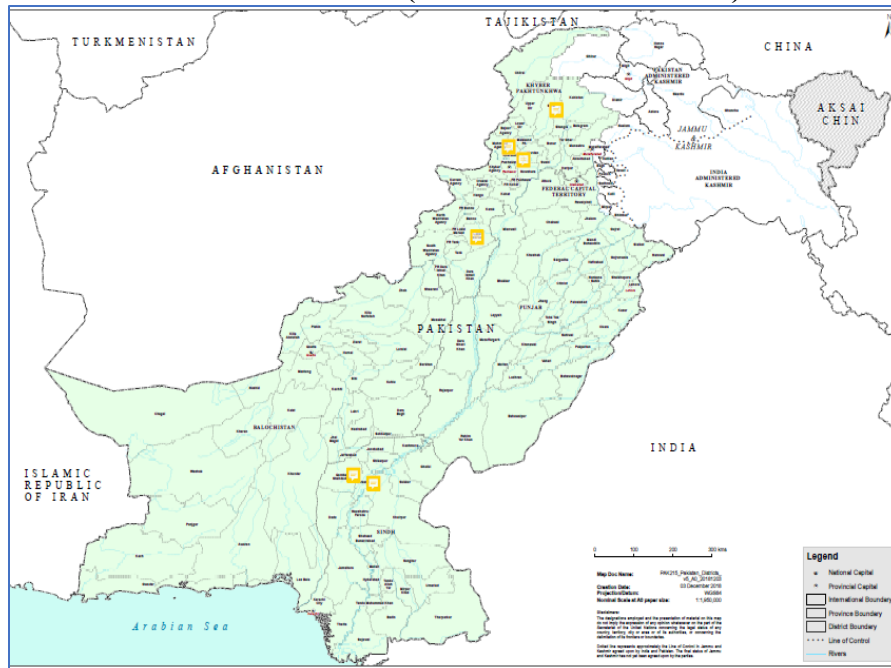
## Introduction

The Integrated Health Systems Strengthening and Service Delivery (IHSS-SD) Activity was awarded to JSI Research & Training Institute, Inc. (JSI) on September 28, 2017. JSI collaborated with three implementing partners: Jhpiego Corporation (Jhpiego), the Rural Support Programs Network (RSPN), and Contech International. Jhpiego and RSPN completed their scope of work in September 2020 and closed out program activities. Contech International was given an extension until January 2021 to complete refurbishments in seven health facilities located in Khyber Pakhtunkhwa (KP). On August 17, 2020, USAID extended the IHSS-SD award to September 2022. On IHSS-SD Activity award further extended to September 1. USAID awarded a performance extension to the IHSS-SD Activity until September 2024, increasing the overall total estimated cost (TEC) to US\$64.1 million (from this point forward all dollar amounts are US dollars).

Per the original work plan submitted in 2017, IHSS-SD planned to work in the provinces of KP, Sindh (to continue JSI's Health Systems Strengthening Component legacy work), and at the federal level. However, with the modification to expand USAID's COVID-19 support to the Government of Pakistan, IHSS-SD Activity extended its support to include Punjab province and through the Ministry of National Health Services, Regulations & Coordination (MoNHSR&C) to the Balochistan province and Muzaffarabad and Gilgit Baltistan areas.

Beginning in 2020, the IHSS-SD Activity programmatic focus, including funding, was redirected to specific COVID-19 support under the Global Health Security Agenda (GHS). The annual work plan was re-aligned with USAID's Country Development Cooperation Strategy and USAID's Vision for Health Systems Strengthening (HSS) 2030 document.

### IHSS-SD Intervention Areas (Provinces and Districts)





## Program Year 3 (PY3) Activities and Results

This section presents progress on activities and results by province from October 1, 2020–September 30, 2021.

### Policy and Advocacy Support

a) Support to Ministry of National Health Services, Regulations & Coordination

#### **1. Health Planning, System Strengthening, and Information Analysis Unit**

The public health sector in Pakistan was in critical need of a technical, advisory unit to develop and implement health system level reforms. A technically sound, academically credible unit was not only essential, but necessary to facilitate international and national discussions on health system strengthening. To support a coordinated planning and policy making body at the federal level, particularly in the context of devolution, USAID through the IHSS-SD project established the Health Planning, System Strengthening, and Information Analysis Unit (HPSIU) in 2019. During PY3, this unit served as a strategic, monitoring, and technical advisory arm of the Health Ministry to develop health sector reforms in Pakistan, including Universal Health Coverage (UHC). HPSIU is a fully functional integrated unit of the Ministry of National Health Services, Regulations & Coordination.

Key PY3 achievements of HPSIU, with IHSS-SD technical assistance, include:

##### *Health Planning and Reform*

HPSIU generated a body of evidence for the planning and reforms process. This evidence included developing a strategic policy framework, appropriate regulations, and accountability systems, and ensuring that they were established at the federal and provincial levels. HPSIU developed generic and province/area specific Disease Control Priorities-3 (DCP-3) and adapted the UHC Benefit Packages.

##### *Align Health System Strengthening activities in the country*

HPSIU promoted an understanding among policymakers about objectives and functioning of an efficient health system, challenges faced, and how it needs to be strengthened to provide quality UHC. HPSIU also commissioned fiscal space analysis of the MoNHSR&C annual budget.

##### *Provincial support and linkages*

HPSIU has actively maintained coordination with provincial health sector reform units/planning and policy units focusing on the system issues in developing the Provincial Health Plans/reform agenda. An Inter-Ministerial Health and Population council was set up, led by the HPSIU, to coordinate the federal and provincial health planning and policy.

##### *Pakistan Health Information System (PHIS) dashboard*

With USAID support, IHSS-SD developed an integrated on-line interactive health information dashboard now housed within the HPSIU. This dashboard serves as a national-level knowledge-information hub and is linked with provincial routine health information systems and their

respective dashboards. Additionally, it acts as a management console for health managers and policymakers through linkages with recent national level health and social sector surveys (i.e., Pakistan Standards of Living Measurement Survey, Pakistan Demographic and Health Survey, Multi-indicator Cluster Survey, National Nutrition Survey), National Health Accounts, and information systems of vertical preventive health programs: Expanded Program on Immunization; HIV/AIDS; tuberculosis (TB); lady health workers (LHWs); maternal, newborn, and child health (MNCH); and hepatitis.

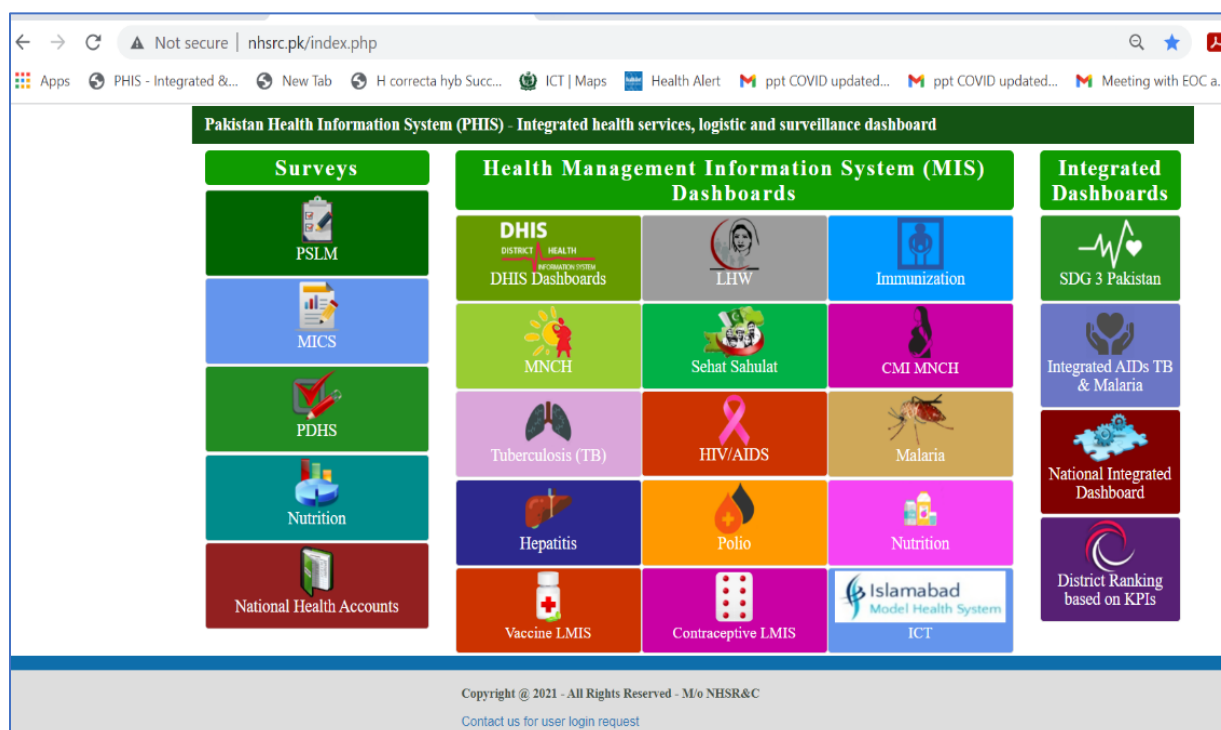


Figure 1: Snapshot of PHIS dashboard on the MoNHSR&C website.

### *Health Information Analysis*

IHSS-SD supported the development of Pakistan’s on-line dashboard to monitor COVID-19. HIPSU leveraged this data resource hub in modeling and forecasting the resource requirements and interventions to combat and contain the spread of COVID-19. HIPSU ensured regular in-depth analyses and review of COVID-19 data and supported the coordination with provinces and international partners. HIPSU also coordinates and reports data on the Sustainable Development Goals (SDGs Health).

## **2. Pakistan Health Knowledge Hub**

For many years, donors, United Nations organizations, international and national nongovernmental organizations (NGOs), research and development, and academic institutions have supported the federal ministry and provincial departments of health to strengthen health systems and implement projects to improve health outcomes in Pakistan, focusing on women and children. These projects have generated a wealth of information, which can be a resource to guide policies and health programs. The MoNHSR&C recognized the importance of establishing a knowledge management unit at the HPSIU and requested the IHSS-SD Activity to provide technical assistance to support its development. The PHKH is housed on the ministry’s website

and a dedicated staff at HPSIU is responsible for periodically adding documents to this repository.

In 2020, the Pakistan Health Knowledge Hub (PHKH) was launched. As an open access resource, it is a technical resource for government officials, academia, researchers, policy developers, and decision makers, including all members of the public. It regularly reviews and uploads documents.

The content on PHKH are organized systematically and follows the general guidelines provided by the National Health Vision (NHV) 2016–25. The eight thematic pillars from NHV 2016–25 provide the overall umbrella for categorizing documents uploaded on PHKH. These are (1) Governance, (2) Health Finance, (3) Global Health, (4) Cross-Sectoral Linkages, (5) Human Resources for Health, (6) Packaging Health Services, (7) Essential Medicines and Technology and (8) Health Information System. Further categorization follows topics such as health systems, maternal and health, sexual and reproductive health, communicable and non-communicable disease, nutrition, disease prevention, and others.

The PHKH has organized and made available more than 9,000 documents, such as the Planning Commission proforma 1 (PC-1), strategies, policies, and important official notifications. Moreover, technical reports, analytic reports, briefs, scientific papers, training manuals, guides, handbooks, etc. are also available on PHKH for reference.

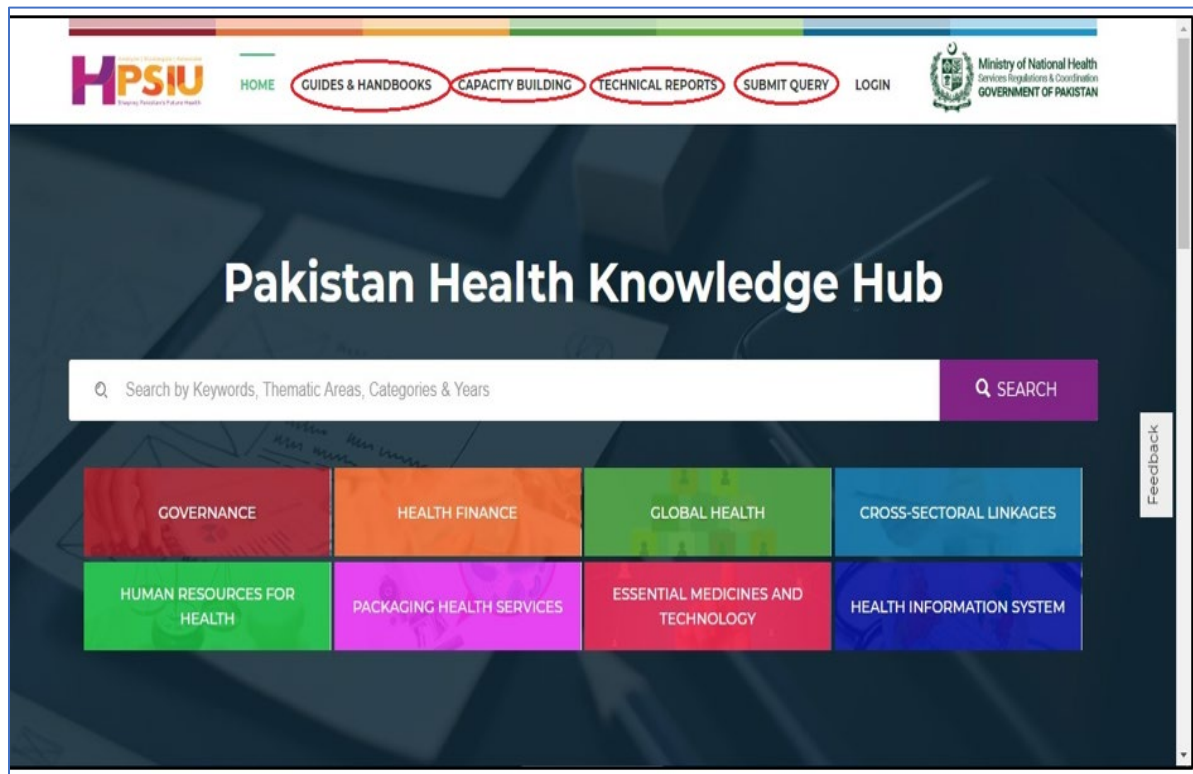


Figure 2: Snapshot of PHKH dashboard on the MoNHSR&C website.

b) Technical Support to Islamabad Health Care Regulatory Authority

Islamabad Healthcare Regulation Act 2018 is a legislative basis for establishing the Islamabad Healthcare Regulatory Authority (IHRA). The IHRA should provide a regulatory framework to ensure the provision of quality health care services to residents of the Islamabad Capitol Territory (ICT). As described in the figure, key functions of the IHRA includes registration and licensing of all public and private sector health care establishments, investigating malpractice and complaints, and taking steps to curb quackery in the jurisdiction of IHRA.

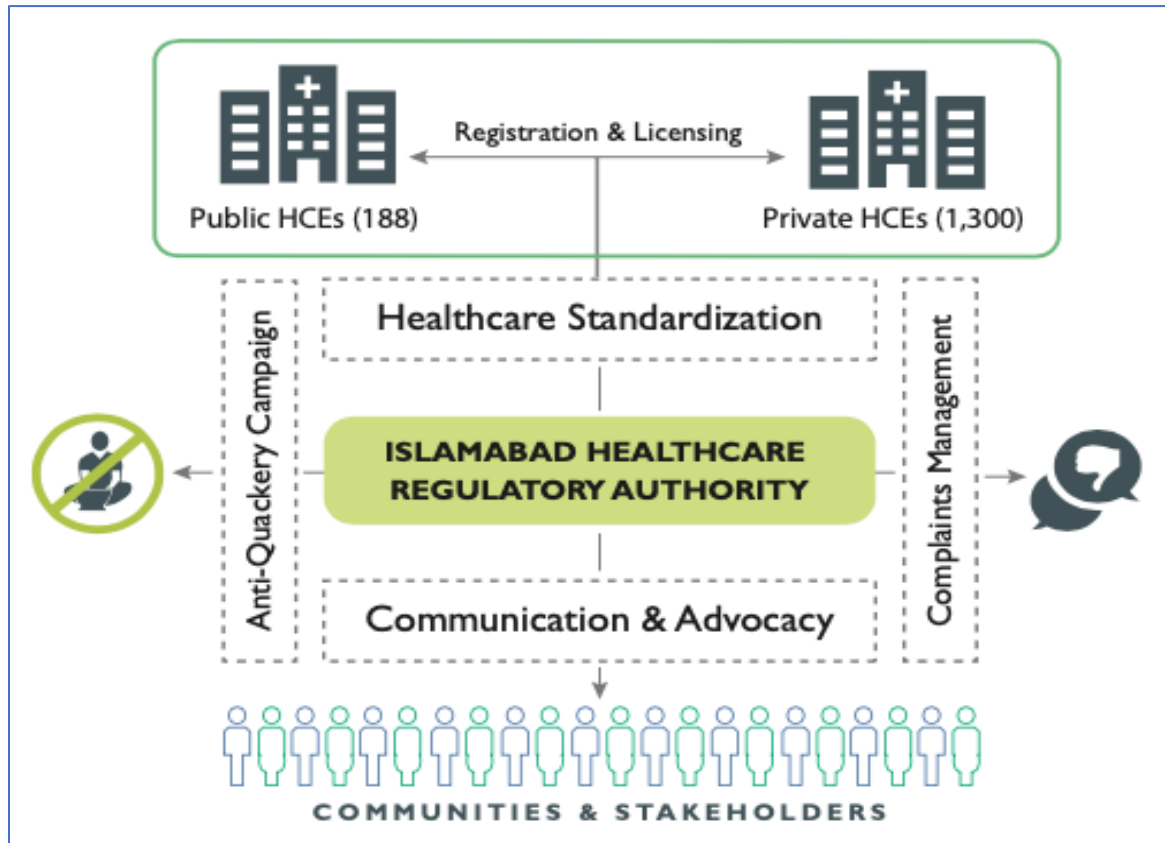


Figure 3: Key functions of IHRA as defined in its Act.

Since August 2020, IHRA leveraged support of IHSS-SD Activity for its institutional development and fast-track operationalization. Key areas of technical assistance are as follows:

*Analytical Review of Islamabad Healthcare Regulation Act, 2018*

Initiating the technical assistance, the IHSS-SD Activity team conducted a thorough review of the Islamabad Healthcare Regulation Act, 2018 to analyze the salient features of the act, its provision and comparative analysis of IHRA with acts of other health care commissions in Pakistan. Findings from this analysis fostered a common understanding among stakeholders and paved the way to identify appropriate strategies to implement the provisions of the IHRA.

### *IHRA Rules of Business*

Technical assistance was provided to draft the Rules of Business in light of Islamabad Healthcare Regulation Act, 2018. These rules outlined the powers and functions of the authority, IHRA board and its committees, allocation of business among different working units of the authority, procedures for disposal of business, relationship with the federal government, matters related to budget and accounts, and miscellaneous provisions.

### *IHRA Regulations*

Regulations for Registration, Licensing, Complaints Management, and Human Resource were developed. These regulations were drafted by engaging legal expertise and working in close coordination with Regulations Review Committee of IHRA.

### *Minimum Service Delivery Standards*

IHSS-SD Activity team supported the development of minimum service delivery standards (MSDS) for the following types of health care establishments:

1. MSDS for hospitals
2. MSDS for primary healthcare facilities
3. MSDS for dental clinics
4. MSDS for clinical laboratories
5. MSDS for hair transplant and cosmetic centers
6. MSDS for rehabilitation centers
7. MSDS for cardiac catheterization labs.

Starting with the notification of Technical Committees on Standards Development, support was provided in conducting comparative reviews of existing standards and developed base documents for review in these committees. Members of these committees and external experts used feedback to refine the drafted standards. After the Board approved them, the standards were submitted to the Ministry of National Health Services Regulation and Coordination for notification.

### *Technical Reviews*

The IHSS-SD Activity team supported the IHRA Board in conducting reviews and updating various technical documents, including the HR Manual, terms of reference (TORs) of IHRA committees, the business plan, and advocacy briefs.

## Global Health Security Agenda

a) Collaborating and coordinating with National Institute of Health on International Health Regulations

IHSS-SD supported the National Institutes of Health (NIH) to lead the development of a national surveillance and response system. All stakeholders were engaged to undertake specific capacity building efforts. Strategic framework for public health laboratories network, Integrated Disease

Surveillance and Response, and legal framework for surveillance were developed in PY3. Emergency Operation Centers and Coordination units for disease surveillance and response have been established at the federal and provincial levels; they will provide meaningful information for action(s). Provincial and District Disease Surveillance and Response Units are the backbone of an integrated disease surveillance and response system.

In PY3, the IHSS-SD Activity established district disease surveillance and response units (DDSRUs) in every district of Pakistan. This support is integral to the disease surveillance information flow from district to province, and to the command and control center (CCC) at the health secretariats of each province/area. The outcomes of the GHSA support under IHSS-SD are reflected in table 1.

**Table 1: Outcomes of the GHSA Support**

	<b>GHSA Activities supported by IHSS-SD</b>	<b>Potential Contribution to COVID-19 and other communicable diseases</b>
i.	PC-1 Strengthening of Federal Epidemiological & Disease Surveillance Division, NIH, and Public Health Lab Network	Effective Field Epidemiology & Disease Surveillance Division (FE&DSD) support and lab network across the country
ii.	PC-1 Field Epidemiology and lab training program transitioning to National Institute of Health	Institutionalizing HR capacity building for COVID-19 and other public health threats
iii.	PC-1 Anti-microbial resistance and infection prevention and control	Will lead to development of national infection prevention and control (IPC) guidelines and strategies to combat COVID-19
iv.	PC-1 Strengthening point of entry (POE) under Central Health Establishments	Strengthen screening and surveillance capacity at POEs
v.	Technical assistance to Federal Disease Surveillance and Response Unit (at FE&DSD at NIH)	Effective coordination and linkage building with provinces and areas
vi.	Support NIH for coordination with other line ministries and provincial counter parts for implementation of international health regulations (IHR-GHSA).	Improve coordination among line ministries under One Health platform
vii.	Strengthening linkages of National Public Health Reference Laboratory at NIH with provincial public health laboratories network	Better coordination between provincial reference labs with NIH.
viii.	Strengthening risk communication system including risk assessment	Capacity building for effective risk communication as per protocols
ix.	Assistance to strengthen Provincial Disease Surveillance & Response Unit (PDSRU) and DDSRUs	Data collection, management and analysis for generating daily, weekly, and monthly alerts and bulletins.
x.	Organize provincial training-of-trainers for master for rapid response teams (RRTs), front	Building a pool of master trainers for cascading trainings at district level

	line managers, case definition and management integrated disease surveillance and response (IDSR), and lab trainings	
xi.	IDSR pilot districts identified by NIH for reporting supported by different development partners. IHSS-SD is supporting 4 districts: Charsadda and Lakki Marwat in KP, and Larkana and Kamber Shadadkot in Sindh.	All program staff in IHSS-SD supported districts were trained in IDSR data management and reporting on notified infectious diseases from their health facilities

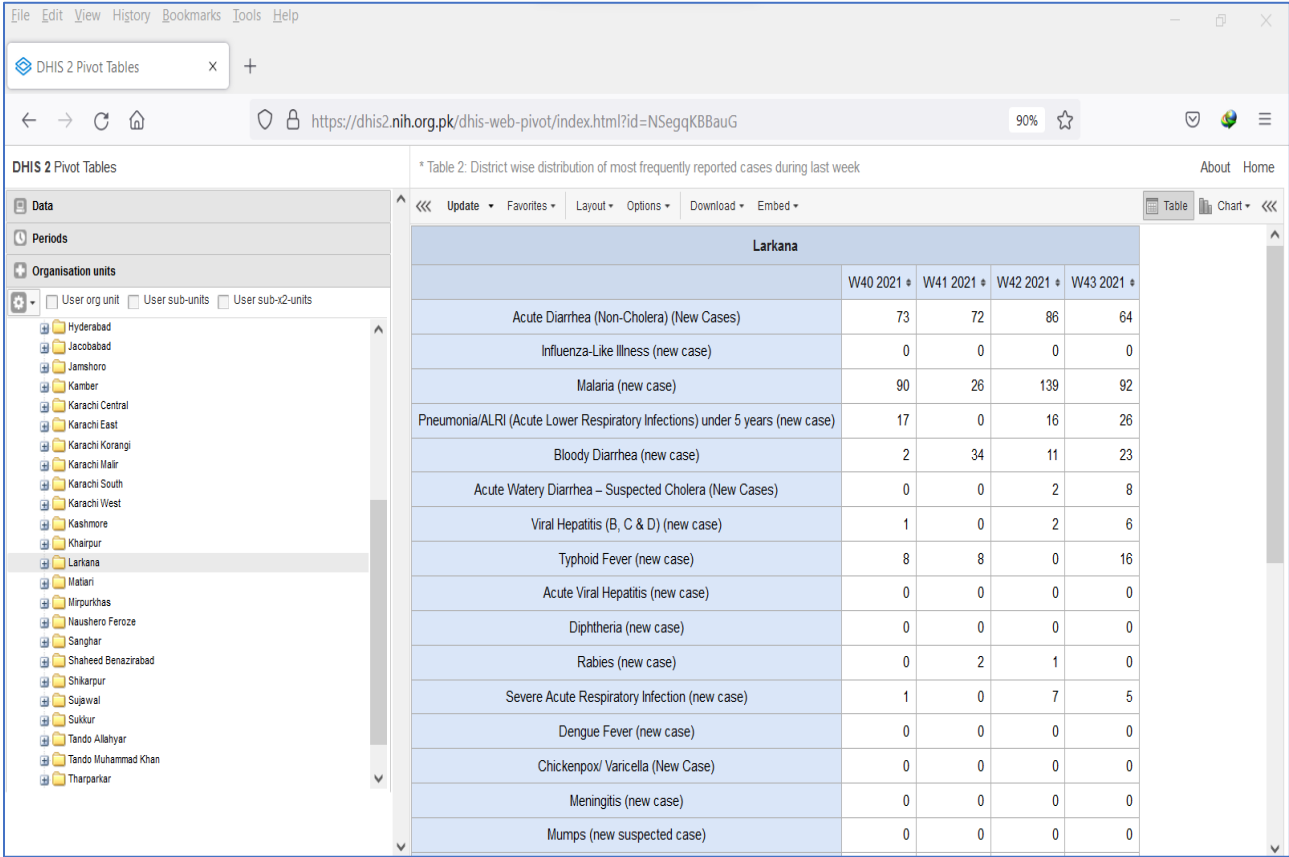


Figure 4: Weekly IDSR bulletin collated at NIH on all notifiable diseases reported from IDSR trained districts

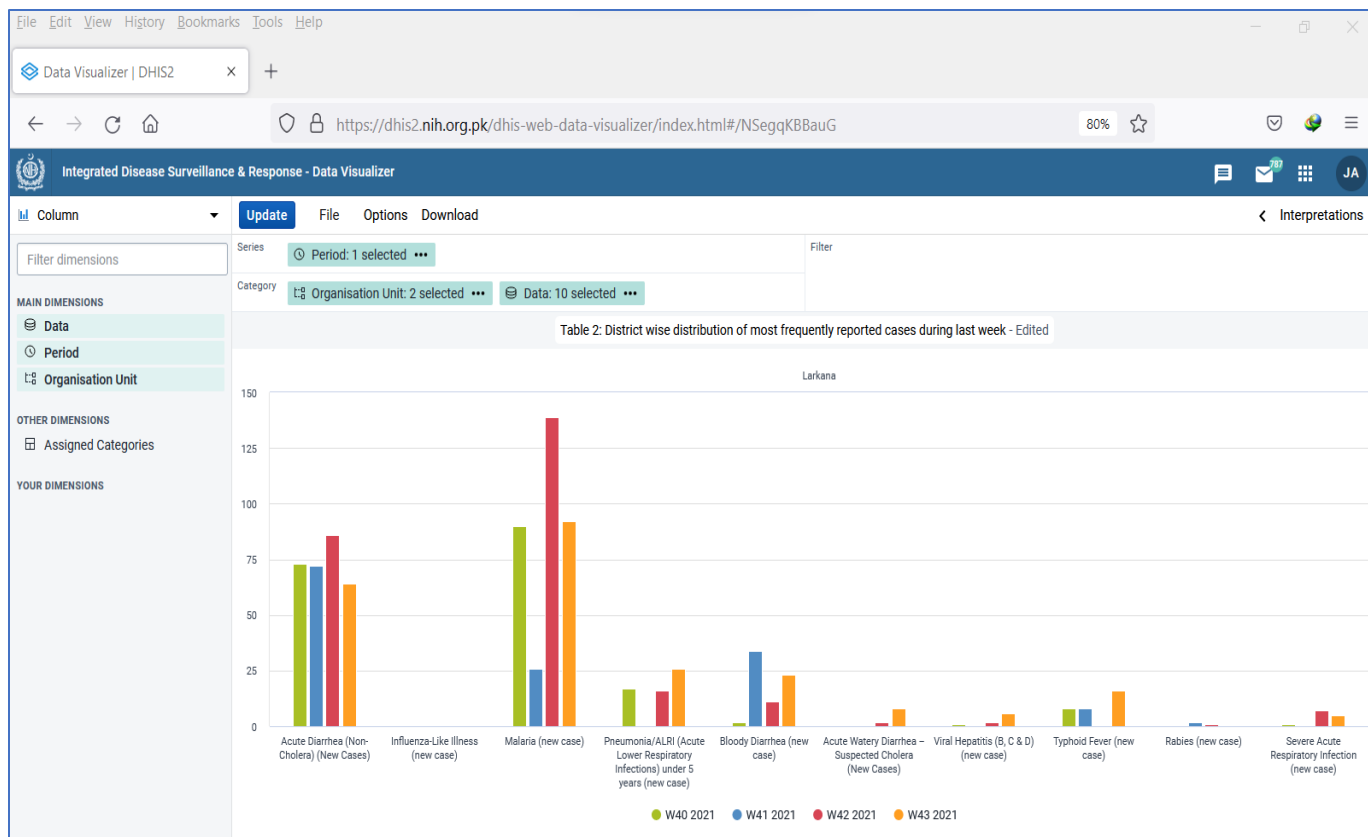


Figure 5: Weekly IDSR bulletin with graphical presentation of disease trends (week wise)

#### b) COVID-19 support under GHSA

In PY3, IHSS-SD Activity continues to extend its GHSA support to all the provincial health departments in line with government’s overarching COVID-19 strategy which is focused on capacity building, strengthening surveillance system and increasing COVID-19 vaccination coverage.

IHSS-SD Activity worked closely with the provincial health offices in all four provinces: KP Sindh, Punjab, Balochistan, and two federally administered areas—Muzaffarabad and Gilgit Baltistan. The technical support provided under COVID-19 focused on surveillance infrastructure and logistics, as well as capacity building of health facility and community based staff on infection prevention, home based care for mild COVID-19 cases, case management guidelines for mild to moderate COVID-19 cases, managing COVID-19 cases in intensive care units.

#### a) Support for establishing six CCCs for COVID-19 in the Health Secretariats of all provinces/areas

IHSS-SD supported the establishment and operationalization of the CCCs in all the Health Secretariats across the country for monitoring, reporting, and decision-making around the COVID-19 response. Because these centers are based within the Secretary Health office, it serves as the highest platform for decision-making, guidance for implementation, and for donors’ coordination.



All six CCCs are operational, with furniture in place and audio-visual equipment installed. IHSS-SD's support demonstrated the importance of constant connectivity of DDSRUs and the PDSRUs with the CCCs, which has become the backbone of an integrated and timely disease surveillance and response system in each province. A ceremony was held on December 16, 2020, to signify the launch of all 155 DDSRUs connected to the MoNHSR&C and NIH, Islamabad.

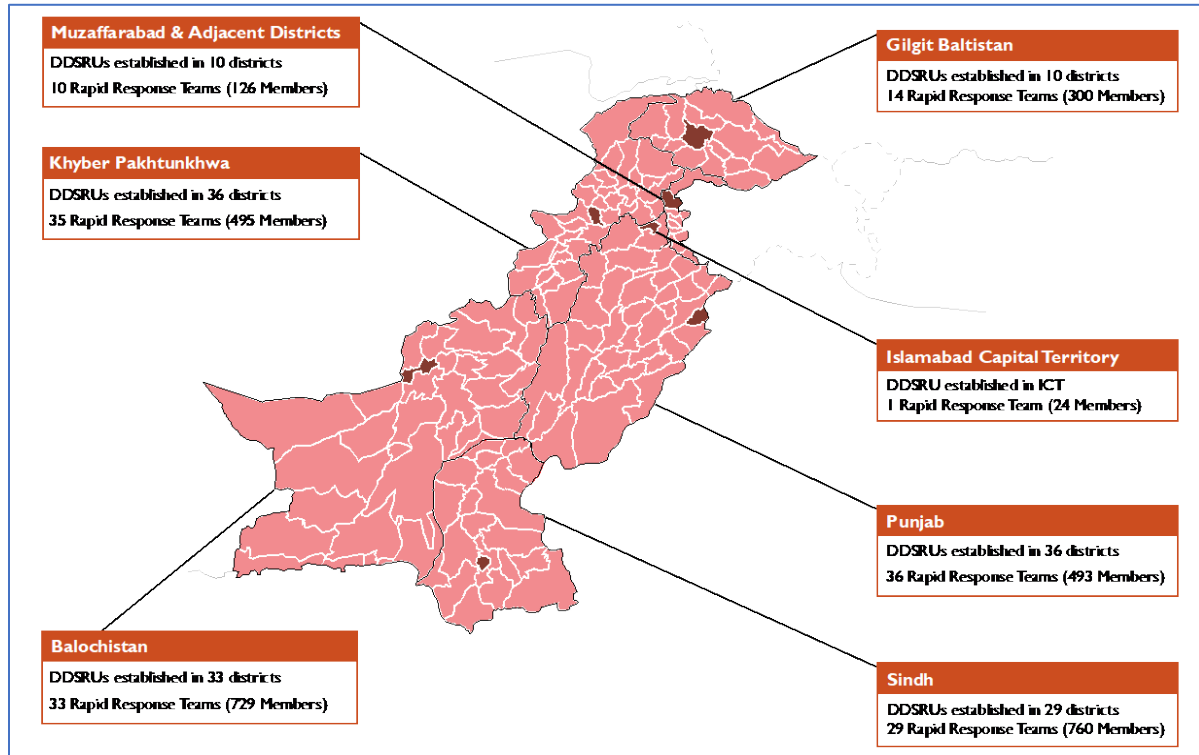


Figure 6: Map of Pakistan showing IHSS-SD supported RRTs and DDSRUs established throughout the country.

The CCCs and PDSRUs are generating daily and weekly bulletins on the COVID-19 situation in the province. These bulletins and situation reports are circulated on WhatsApp groups and are presented to the DGHS and Secretary Health for important decision-making based on current district data. The technical support extended to all CCCs includes short term HR support in the form of one public health specialist, data analyst, and data entry operator to facilitate the operations of the CCC.

As a result of continued advocacy and engagement with the office of Minister for Health & Population Sindh, the allocated budget for CCC has been released in this reporting year. The Department of Health (DOH) Sindh also developed, approved, and notified TORs for DDSRUs, PDSRU, and CCC with clarity on roles and responsibilities. Whereas, in Punjab, IHSS-SD team throughout the year helped the CCC in generating daily situation reports on COVID-19.

USAID's support, which was extended during a critical time for COVID-19, has been highly acknowledged in the GoP. This support has become a landmark in strengthening the IDSRS in the country. This strategic support not only helped the GoP, but also provided a platform for all donor funded projects.

## b) Capacity building of health care providers in infection prevention & control

The COVID-19 pandemic redefined infection prevention measures/standards due to its transmission, contagious level, and number of patients infected. The World Health Organization (WHO) published COVID-19 guidelines in March 2020, which outlines specific recommendations on COVID-19 suspects, collecting and handling laboratory specimens from patients with suspected COVID-19, duration of contact, droplet precautions for patients with COVID-19 and recommendations for outpatient care. The GoP notified the National Guidelines on Infection Prevention and Control on April 20, 2020. These guidelines were based on WHO recommendations, supplemented by the evidence-based and best practice guidelines published by the Centers for Disease Control and Prevention. Concerted efforts have been made to keep these guidelines concise and simple; supplemented by illustrations to facilitate understanding. The principal objective of national guidelines is to provide basic and simple infection prevention & control (IP&C) practices, which must be implemented at all times for extending safe care in all health care facilities (primary, secondary, and tertiary health care facilities- in both private and public sectors). In Punjab, the Department of Primary & Secondary Healthcare shared its own curriculum for the training, which was used in the trainings held in Punjab.

During the reporting year, IHSS-SD Activity trained the health care providers working at DHQ, THQ, and rural health centers on the National Infection Prevention and Control guidelines. Staff working in operation theaters, labor rooms, and outdoor clinics of the hospitals were trained. When a district has a tertiary care hospital, staff of critical units were also trained. These trainings were mainly executed in the high-disease-burden districts of Pakistan and have generated a skilled HR pool in the provinces to deal with infection prevention in the hospitals, especially while dealing with COVID-19 patients. These USAID-supported trainings are highly acknowledged and appreciated by all provincial health departments.

In spite of recurring waves of COVID-19, trainings continued in the target high-burden districts with all requisite standard operating procedures (SOPs) using necessary prudence. IHSS-SD Activity's PY3 IP&C training achievements are shown in table 2.

**Table 2: Health Care Workers Trained in IPC Versus Performance Targets**

<b>Training</b>	<b>Punjab (15 districts)</b>	<b>Muzaffarabad (3 districts)</b>	<b>KP (36 districts) ongoing</b>	<b>Sindh (15 districts) ongoing</b>	<b>Gilgit (3 districts)</b>	<b>Balochistan (14 districts)</b>
IP&C	1,278/1,384 (92%)	450/450 (100%)	1,651/2,400 (68%)	62/2450 (3%)	395/321 (123%)	1,528/1,630 (93%)

**c) Training LHWs and other outreach health staff on home based care for COVID-19 (mild cases)**

The IHSS-SD Activity provided support to all the provincial health departments in adapting the curriculum for the home based care (HBC) for COVID-19 training for LHWs. The curriculum was finalized and translated in Urdu and Sindhi. Training was conducted in the selected districts where the COVID-19 disease burden was high. These districts were selected in consultation with the respective provincial health departments.

In Punjab, at the request of the Primary and Secondary Healthcare Department, the outreach health workers were trained instead of LHW, because the COVID-19 was more prevalent in urban areas where there were no LHWs. To reduce patient volume at hospitals, these outreach workers educated the urban and peri-urban communities in managing the mild COVID-19 cases confined and isolated at home. IHSS-SD Activity trained provincial master trainers, who, in turn, trained the district level master trainers. Cascade trainings were then rolled out at the district level. IHSS-SD Activity’s HBC training achievements are reflected in table 3.

**Table 3: Health Care Workers Trained in HBC Versus Performance Targets**

<b>Training</b>	<b>Punjab (15 districts)</b>	<b>Muzaffarabad (3 districts)</b>	<b>KP (36 districts)</b>	<b>Sindh (15 districts)</b>	<b>Gilgit (3 districts)</b>	<b>Balochistan (14 districts)</b>
HBC	3,725/4,046 (92%)	1,251/1,251 (100%)	16,014/16,512 (97%)	9,696/11,234 (86%)	487/547 (89%)	2,441/3,062 (80%)

In this reporting year, the IHSS-SD Activity completed the first round of HBC training in 84 high-burden districts of Pakistan. IHSS-SD Activity will cover additional districts for HBC training, depending on the COVID-19 situation and after receiving a formal request from the provincial health departments.

**d) Training of hospital staff on intensive care unit/ventilators management of COVID-19 patients**

This was a special intervention under IHSS-SD Activity, following the donation of 200 ventilators by the U.S. State Department to the GoP. USAID requested IHSS-SD to provide training to the hospital staff where the ventilators were distributed through the National Disaster Management Authority.

Training curriculum was adapted and finalized by a technical working group consisting of senior consultants and physicians. Nominations were received through National Disaster Management Authority for all the selected hospitals. Nine tertiary care hospitals selected as training sites had the most experience in an intensive care unit (ICU) and ventilator use. These include Civil Hospital Karachi for Sindh Province, Sheikh Khalifa Bin Zayyed Al-Nahyan Medical Complex, Quetta for Balochistan, King Edward Medical University Lahore, Bahawal Victoria Hospital Bahawalpur, and Allied Medical University Faisalabad for Punjab, Lady Reading Hospital Peshawar, Ayub Teaching Hospital Abbottabad and Saidu Teaching Hospital Swat for Khyber Pakhtunkhwa and Pakistan Institute of Medical Sciences Islamabad for Gilgit Baltistan, Muzaffarabad, and adjacent districts. Some districts of Gilgit Baltistan, Muzaffarabad, and the

adjacent district were supported by the Allied Hospital Faisalabad and Ayub Teaching Hospital Abbottabad. The staff trained included the anesthetist, ICU in-charge, pulmonologist, medical officers, staff nurses, and paramedics.

A total of 862 participants have been trained across the country in ICU/ventilator management of COVID-19 cases this year. Table 4 reflects the number of participants within the geographic province or area.

**Table 4: Details of ICU Staff Trained in Various Provinces in the Reporting Year**

Muzaffarabad & adjacent districts	136
Sindh	124
Balochistan	77
Gilgit Baltistan	98
Khyber Pakhtunkhwa	346
Punjab	81
<b>Total</b>	<b>862</b>

**e) Training of health care providers on case management for COVID-19 (mild and moderate cases admitted in hospitals)**

This training was designed at the request of Health Department KP and was conducted for health personnel in KP. The training curriculum was developed and approved in consultation with the lead consultants of the provincial infectious disease surveillance committee. At the end of PY3, the IHSS-SD Activity had trained staff nominated by the health department, representing all 36 districts of the province, including the newly merged districts. Of the total 2,065 staff eligible for training, 1,652 health care providers (80 percent) have completed training. On the advice of the health department, the IHSS-SD Activity has concluded this support in the province for now. However, a provision will allow for providing refresher training to the previous groups and also to enroll new providers in this training, depending on the DOH.

This training has helped create a critical mass of hospital staff trained in managing the COVID-19 cases admitted to isolation wards, quarantines, high dependency units, etc. in the secondary and tertiary care hospitals in the province.

**f) Establish Two Centers of Excellence for Infectious Diseases and IDSR in Khyber Pakhtunkhwa**

Clinical management guidelines for COVID-19 have evolved since the beginning of 2020. The NIH, as well as the provincial health departments, have updated these guidelines periodically to reflect these changes. To protect patients and practitioners, it is imperative that the frontline workers facing COVID-19 suspected and confirmed cases are trained and updated on the latest guidelines. IHSS-SD Activity has supported trainings in intensive care units of tertiary hospitals in KP. Learnings from this experience demonstrates that trainings are rigorous and demand an

ideal environment with state-of-the-art equipment and training facility to impart the requisite set of hands-on skills to the health care providers. Therefore, ongoing capacity development and infectious disease training is needed.

A center of excellence (COE) is a team, shared facility, or entity that provides leadership, best practices, research, support, and/or training for a focus area. IHSS-SD Activity has proposed to establish a KP COE for infectious disease training, especially COVID-19, and to prepare for future outbreaks. The master trainers in the proposed COE have a cutting-edge knowledge and competency in the area of infectious diseases, including COVID-19. These highly-skilled individuals and experts will continue to disseminate knowledge and share best practices. Moreover, these COEs will also serve as the training centers for scaling up the IDSR training in the region to build the capacity of health personnel in all priority notifiable diseases.

The health department proposed five sites, which were assessed by the IHSS-SD team for feasibility. Two sites were finalized, including Gujju Khan Medical College Swabi and Saidu Teaching Hospital Swat. The main criteria for selection of the site was the presence of an infectious diseases department and trained HR. These factors will ensure ownership, operationalization, and optimal utilization of the facility to be established with USAID's support.

A leading consultant in infectious diseases of KP prepared the list of equipment required for the COE; the IHSS-SD team reviewed the list. In PY3 the IHSS posted a request for quote (RFQ) for procurement. Necessary refurbishment works at the two sites are underway.

**g) Support to master of science in public health (MSPH) for mid-level managers from Punjab and Balochistan**

USAID approved the support to train two groups of mid-career managers of Punjab and Balochistan health departments in a two-year MSPH degree program. This support is to strengthen the health management cadre in the two provinces. The gap was noted while establishing the DDSRUs. After obtaining a graduate-level degree, these managers will become a resource for the health departments to effectively work on infectious diseases surveillance and reporting, and will have management training and improved public health skills.

The Punjab group is enrolled with Health Services Academy in Islamabad, while the Balochistan group is enrolled with the Association of Physicians of Pakistani Descent of North America (APPNA) Institute of Public Health at Jinnah Sindh Medical University Karachi. Both groups have started their academic sessions at the respective institutions.

to the six selected districts of the project: two in Sindh and four in KP. This support is going to facilitate the provincial health departments' capacity for COVID-19 testing and suspected cases tracing in the field by rapid response teams.

*“No doubt this generous support by IHSS-SD Activity/USAID is a great opportunity for us to learn and sharpen our professional and leadership skills of Public Health in a very conducive environment in a prestigious school of Public Health. Enriching Balochistan Province with a skillful human resource in health sector is a key value of this MSPH Program by USAID.*

*Moreover, we may have a brighter future in terms of careers growth after passing out this degree program.” (Dr. Rozina Fazal, MSPH Student Balochistan)*

*“I am confident that MSPH degree in Health Services Academy, Islamabad will equip me with requisite skills to become an efficient public health planner, who can take up an active role in building healthy and supportive communities and by developing multi-disciplinary and collaborative strategies for solving health related issues. I am grateful to USAID and JSI for this generous support.” (Dr. Omer Malik, MSPH Student Punjab)*

**h) Support to Health Departments KP and Sindh by providing viral transport medium and personal protective equipment**

IHSS-SD Activity planned to provide viral transport medium (VTM) and personal protective equipment (PPE) to the Activity’s selected districts to enhance the testing capacity of the health departments for COVID-19. In PY3, the IHSS-SD procured 123, 626 VTMs and 60,000 PPEs and supplied to the six selected districts of the project: four in KP and two in Sindh. This support is going to facilitate these districts to cope with the testing load of COVID-19 and tracing of suspected cases in the field by rapid response teams.

**i) Provision of Suzuki Bolan for mobilization of rapid response teams**

In the first phase of COVID-19 support to the provincial health departments, IHSS-SD Activity trained more than 3,000 staff of the district health offices (DHO) as RRTs to deal with COVID-19 outbreak. Soon it was clear that because of this unprecedented pandemic, DHO offices had budgetary constraints that prevented the RRTs from mobilizing to suspected sites. In addition, district health authorities did not have vehicles to facilitate their mobilization. USAID agreed with IHSS-SD Activity’s proposal of providing vehicles to ensure the mobility of the rapid response teams based in 36 DDSRUs of KP.

IHSS-SD is providing one vehicle to each of the DDSRU in KP so that RRTs can quickly respond to infectious disease hot spots to collect the samples and data, and report to the district administration for necessary action.

**j) Support to district health offices for COVID-19 vaccination through Mobile Health Service Units**

In June 2021, to improve access and reduce vaccine inequities, the health department KP requested IHSS-SD Activity to support outreach COVID-19 vaccination for populations living far from the vaccination points designated by the government. After approval from USAID, this support was initiated the first week of June 2021. The KP health department’s own mobile health service units (MHSUs) were refurbished through IHSS-SD support for MNCH services for this activity. IHSS-SD Activity has provided a driver, data entry operator, and POL for outreach vaccination services in three Activity’s districts in KP.

The immediate outcome of this support was seen in the significant number of women turning out for COVID-19 vaccination. Since June 2021, nearly 58,262 people were reached, approximately 51 percent of women (see table 5). These women faced many difficulties in going to the static

vaccination centers because of the household chores, traveling hassle, and cultural and gender sensitivities. Despite the initial slow vaccine uptake among community women, the number of women beneficiaries have now surpassed the number of men. Moreover, due to an awareness campaign and visibility of the MHSU offering the services, the clientele for COVID-19 vaccination has grown in the catchment of certain health centers, resulting in a vaccine shortage. The IHSS-SD team has documented this initiative as a case study. See table 5 for the vaccination status to date through three MHSUs.

**Table 5: Vaccination Status of MHSUs Since June 2021 to September 30, 2021**

District	Men	Women	Vaccinated since June 2021
<b>Charsadda</b>	5,863	5,719	11,582
<b>Lakki Marwat</b>	4,174	2,875	7,049
<b>Swat</b>	18,535	21,096	39,631
<b>Total</b>	<b>28,572</b>	<b>29,690</b>	<b>58,262</b>

**k) Power backup systems: Solar systems for strengthening of DDSRUs in all provinces**

IHSS-SD Activity’s support to 155 DDSRUs included necessary refurbishment work, audio-visual equipment, IT equipment, essential office equipment and furniture, and establishing connectivity with their respective PDSRUs. Nevertheless, to address any outbreak, DDSRUs need to be functional at all times, especially during the eight-hour work day. This need became clearer especially during the COVID-19 outbreak. USAID has agreed to allocate funds for providing the energy back-up support to the DDSRUs, which are the worst affected by the power outages.

In the reporting year, the IHSS-SD team conducted the energy backup assessment physically in 150 and telephonically in 5 out of 155 established DDSRUs all over Pakistan. The assessment report was shared with USAID and, after necessary approval, a request for proposal was issued for inviting the bids for installing energy backup systems at the DDSRUs.

Four companies were selected out of the short-listed ones and were awarded the work in different regions. IHSS-SD Activity hired qualified consultants to monitor the energy backup installation process by the vendors.

At the end of Q4 of the reporting year, a total of 108 DDSRUs had an energy backup system installed, representing 84 percent of the selected 129 DDSRUs. The field engineers and respective district staff of IHSS-SD visit each completed site to verify the work. If any rectification work is needed, the vendor will be responsible. SOPs for operating and maintenance of energy back systems have been developed with the requisite branding. These SOPs are being

installed at each site. Energy backup systems installation status until September 30, 2021, is shown in table 6:

**Table 6: Energy Backup System Installation Status as of September 30, 2021**

<b>Province-Wise Status Summary as of September 30, 2021</b>					
	<b>Completed</b>	<b>Work in Progress</b>	<b>Pre-Installation Survey Completed</b>	<b>Pre-installation Survey in-Progress</b>	<b>Total DDSRUs</b>
<b>KPK</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>
<b>Sindh</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>29</b>
<b>Balochistan</b>	<b>22</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>33</b>
<b>Muzaffarabad</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10</b>
<b>GB</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>10</b>
<b>Punjab</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>13</b>
<b>Total</b>	<b>108</b>	<b>18</b>	<b>1</b>	<b>2</b>	<b>129</b>

Moreover, IHSS-SD teams are filling the Environmental Documentation Form (EDF) for each of the site, as advised and approved by USAID.

#### c) Support to Tuberculosis program

Given the status of poverty, nutrition, and average number of family members, the risk of transmission increases many times, especially in rural areas of Pakistan. There is a dire need to address this gap through increased screening in hot spots in focused districts, especially screening of household's contacts of index cases. The overall aim of this sub-activity was to support the Provincial TB Control Program in improving the case detection rate of bacteriologic positive TB cases and decentralize the management of drug resistant TB cases currently under treatment. A concept note was written for implementation of this initiative in five districts. The emphasis was on the gaps identified in the implementation of provincial TB program and its implementing partners.

#### **Contact Tracing and Screening**

To improve the case detection rate and detect hidden cases of TB, IHSS-SD Activity extended support to the TB Control Program Khyber Pakhtunkhwa & Sindh by reaching index cases of drug-resistant tuberculosis (DR-TB) and drug-sensitive tuberculosis (DS-TB), tracing their contacts, and screening them for tuberculosis in districts Swat, Charsadda, and Lakki Marwat in KP and Larkana and Qambar Shahdadkot in Sindh province. The overall composite target for new bacteriologic positive TB cases to be detected in this activity in Khyber Pakhtunkhwa and Sindh was set to 220 cases, inclusive of both drug resistant and drug sensitive TB cases.

IHSS-SD supported tracing and screening households and close contacts of existing TB cases registered with the TB Control Program and by establishing two satellite programmatic management of drug resistant TB (PMDT) sites in KP and one in Sindh. The TB initiative documented the importance of tracing and screening the contacts, because otherwise they would have developed drug resistance. In addition, these new cases of TB would remain undetected for








prolonged periods of time and each TB patient would transmit the disease to approximately 10–12 contacts in one year. This activity gives us ample evidence that tracing and screening contacts of all forms of TB cases can help in the early detection of unknown or undetected TB cases and reduce the transmission of TB in the communities.

In normal practice, only the contacts of drug resistant TB cases are traced and screened by the TB control program. However, IHSS-SD took the initiative to include the contacts of drug sensitive TB cases in the screening process.

### TB Awareness Activities

In addition to contact tracing and screening, IHSS-SD field teams provided awareness sessions to family members of the index cases and members of the community on TB prevention, symptoms, diagnosis, and treatment. See table 6.

**Table 6: IHSS-SD Activity’s Contribution to the Two Provincial TB Programs**

	KP	SINDH
 <b>FOLLOW UP INDEX CASES DS+MDR</b>	Reached <b>1,471 DS-TB</b> and <b>187 DR-TB</b> index cases for further contact tracing	Reached <b>646 DS-TB</b> and <b>169 DR-TB</b> index cases for further contact tracing
 <b>CONTACT TRACING</b>	Traced <b>8,572 DS-TB</b> and <b>1,211 DR-TB</b> contacts	Traced <b>5,425 DS-TB</b> and <b>1,615 DR-TB</b> contacts
 <b>SPUTUM COLLECTION AND TRANSFER</b>	Collected samples from <b>2,883 DS-TB</b> symptomatic contacts and <b>750 DR-TB</b> symptomatic contacts	Collected samples from <b>2,731 DS-TB</b> symptomatic contacts and <b>932 DR-TB</b> symptomatic contacts
 <b>RESULTS AND REGISTRATION</b>	Found, registered, and initiated on treatment <b>138 DS-TB</b> and <b>15 DR-TB</b> new cases	Found, registered, and initiated on treatment <b>76 DS-TB</b> and <b>14 DR-TB</b> new cases
 <b>SOCIAL MOBILIZATION AND AWARENESS</b>	Conducted <b>1,632</b> awareness sessions attended by <b>11,234</b> community members	Conducted <b>782</b> awareness sessions attended by <b>5,518</b> community members

### Establishment of Satellite PMDT Site

IHSS-SD provided support to the Provincial TB Control Program in the decentralization of managing drug resistant TB cases by establishing three satellite PMDT sites: one each at DHQ Charsadda and DHQ Lakki Marwat, and one in Qambar Shahdadkot. These sites expanded the network of PMDT sites making it convenient for patients of drug resistant TB to access lifesaving health services. These satellite sites will be attached to their respective main PMDT sites and will provide services to patients within the district. The sites will greatly reduce the travel and other expenditures of patients suffering from drug resistant TB. They are expected to improve compliance to treatment and treatment success that has been noted in other parts of the world.

The refurbishment work at the site in DHQ Lakki Marwat is complete, while work at DHQ Charsadda is in progress. GeneXpert machines were installed at all sites and are functional, increasing the testing capacity of the district TB control programs. Since districts Swat and Larkana already had a functional PMDT site, therefore IHSS-SD only increased the testing/diagnostic capacity. Equipment for all sites has been delivered to the provincial TB control program. Staff required for running these facilities will be trained by IHSS-SD as soon as they are notified by the TB control program.

### **Coordination Meetings**

The IHSS-SD team met with the National TB program officials, including the Agreement Officer Representative (AOR), to seek guidance on the implementation plan. Regular coordination was maintained at both the district and provincial level through participation in the Intra-district quarterly review meetings of the TB program. Coordination with other stakeholders, such as education department, local NGOs, community organizations, prisons, etc. were also maintained in the districts. Awareness sessions and screening activities were also jointly organized.

### **Achievements of the TB Program**

- In the past, active index household tracing in the community was not done and data was not available on active index community contact tracing. For the first time, with IHSS-SD support, contacts were provided diagnostic services and then facilitated for registration and treatment after diagnosis.
- Twenty-nine cases of drug resistant TB were detected and enrolled for treatment at their respective PMDT sites.
- In the five districts, 214 cases of bacteriologic positive drug sensitive tuberculosis were detected and enrolled for treatment at their respective basic management units (BMUs).
- Five GeneXpert machines were installed in the IHSS-SD Activity's districts.
- Three satellite PMDT sites will be soon ready to function and support provincial TB programs.

### **Way Forward**

- The TB Control Program should be supported to finalize the minimum standards and SOPs for the satellite PMDT sites.
- Meetings should be conducted with the Provincial TB Control Program to designate staff for the newly established satellite PMDT sites.
- The TB control program should be offered support for training staff designated for running the satellite PMDT sites.
- Training for health care providers working in BMUs on tuberculosis is needed to improve referral and case detection of tuberculosis.

### **Health System Strengthening**

#### **a) District Health & Population Management Teams**

After formal notification of formulation of the District Health and Population Management Team (DHPMT), its composition and TOR by the Secretary Health KP, and followed by a further notification by DHOs of the project districts, DHPMT meetings provided multi-sectoral platform at the district level in which DHOs, Deputy DHOs, LHW Coordinators, District Officers from

Social Welfare Department (SWD), District Education Officers (DEO), focal person from Deputy Commissioner Office, Medical Superintendents, TB coordinators, representative from local NGOs, and other public health coordinators participated. IHSS-SD teams played important role in convening these meetings to ensure a regular coordination and better communication between the health authorities and other stakeholders, as well as to use this forum to showcase the USAID support in the selected districts of KP.

So far, 10 DHPMT meetings have been held in the three project districts. During these meetings, formal SOPs were followed, such as an invitation letter from DHOs to all members, formulation of common agenda for each meeting with concurrence of members, issuance of minutes of the meeting, and follow-up actions. The most important activity of these meetings is to discuss and suggest resolutions to local issues faced by the health, population welfare, and education departments in advancing their agenda at the local level. The committee has been instrumental in addressing the COVID-19 vaccination campaigns in the communities and schools. This forum also helped in coordinated efforts toward immunizing children for polio. One of the positive outcomes of these meetings is better coordination between the health and population welfare department. Whereby population welfare relocated few of its outlets to the health department facilities.

IHSS-SD Activity has attempted to showcase a model of DHPMTs in three selected districts of the project. This is a point of advocacy with the health department that such DHPMTs must be formed in all other districts as well.

#### b) Restructuring of DOH Sindh

##### **Adopting System's Approach: Form follows function**

In 2018, the Chief Minister Sindh approved the request of DOH to shift vertical programs from development to non-development budget. USAID Health Systems Strengthening project, implemented by JSI, was asked to provide technical support. The proposal was presented to the Secretary of Health, which was finalized after a series of meetings in April 2019. The JSI team worked on the existing functions of the health department being carried out by different units and levels. In Sindh, the Health Secretariat is in Karachi, Director General Health Services (DGHS) office is in Hyderabad, and there are 29 districts. Over a period of time, starting in 1987, vertical programs were designed to focus on different areas of primary health care, such as Expanded Program of Immunization, MNCH, nutrition, National Program for Primary Health Care and Family Planning (LHW program), etc.

The institutional review revealed restructuring of DOH with a focus on the DGHS office, Directorate of Health Services (DHS) at divisional level and DHO at the district level. To avoid redundancies, the organogram at each level was revised for staff Basic Pay Scale 17 and above. There was a re-designation of 1,425 posts so no staff lost their job, but job descriptions of staff were revised to match the functions to be performed by the different offices of DOH.

It was a huge reform that required a review of 560 cost centers where budgets are received to perform the functions. This particular component of restructuring required close collaboration with the Department of Finance, management of vertical programs, Secretary of Health, and DGHS. The post budget support was provided by USAID IHSS-SD Activity as part of legacy work in Sindh. All posts were rationalized, job descriptions were adjusted, and the proposal of adjustments of posts were included in the budget book. The DOH senior management was given orientation to the adjustments and restructuring.

One-on-one meetings with vertical program managers and their teams were organized in which programmatic, financial, logistics, and human resources were reviewed. Special attention was paid to any liability on DOH during shifting of vertical programs from development to non-development budget. The staff of vertical programs was adjusted in the revised organograms.

1. Issuance of notification of approved organogram of Director General Health Services Sindh (DGHSS), DHS, and DHO offices.
2. Issuance of notification of JDs of approved posts as per organogram.
3. Executive order of posts re-designated during the process of restructuring of DoH.
4. Release of budget of newly created cost centres and objects codes at DHS and district level (Allocations of Supervision and Monitoring, Capacity Building, Health Education, etc.).

After stakeholders' consensus, the DOH submitted the final proposal with supporting documentation to the Finance Department. After the Finance Department cleared it, the summary was submitted for approval to the Chief Minister Sindh. After the Chief Minister's approval, it was incorporated in the budget book of FY 2020–21.

To operationalize the restructuring of DOH Sindh, at the request of DOH, IHSS-SD Activity provided technical support.

1. Comparative study of budget conducted for the demand versus provision in the budget book of FY 2020–21.
2. To draft a letter for the issuance of notification of approved organogram.
3. To review Job Descriptions of all approved posts as per organogram and provided technical assistance to DGHSS for finalization and submission to DoH for approval.
4. To draft letter for inclusion of 11 posts missing in budget book of FY 2020–21.
5. Comparative study conducted of posts proposed and reflected in budget book of FY 2020–21 in office of DGHSS, DHS, and DHOs.
6. Provided technical assistance and drafted a proposal for the issuance of executive order of 1,348 posts out of total 1,425 posts as 66 posts of same nomenclature were available.
7. Provided orientation to all district disbursing officers and heads of account sections of DGHSS, DHS, Provincial Health Development Center, and DHO office for orientation of budget allocated in various cost centers to conduct activities related to shifting of vertical projects from development to non-development in budget book of FY 2020–21.

Finally, in August 2021, the notifications were issued for implementing the plan. This is a success story of system strengthening where the funds and HR was transitioned from the project

to the program side. Department of Health Sindh is the first among other provinces and regions to have implemented the devolution in its true spirit. In addition, the vertical programs are now part of DOH's regular budget.

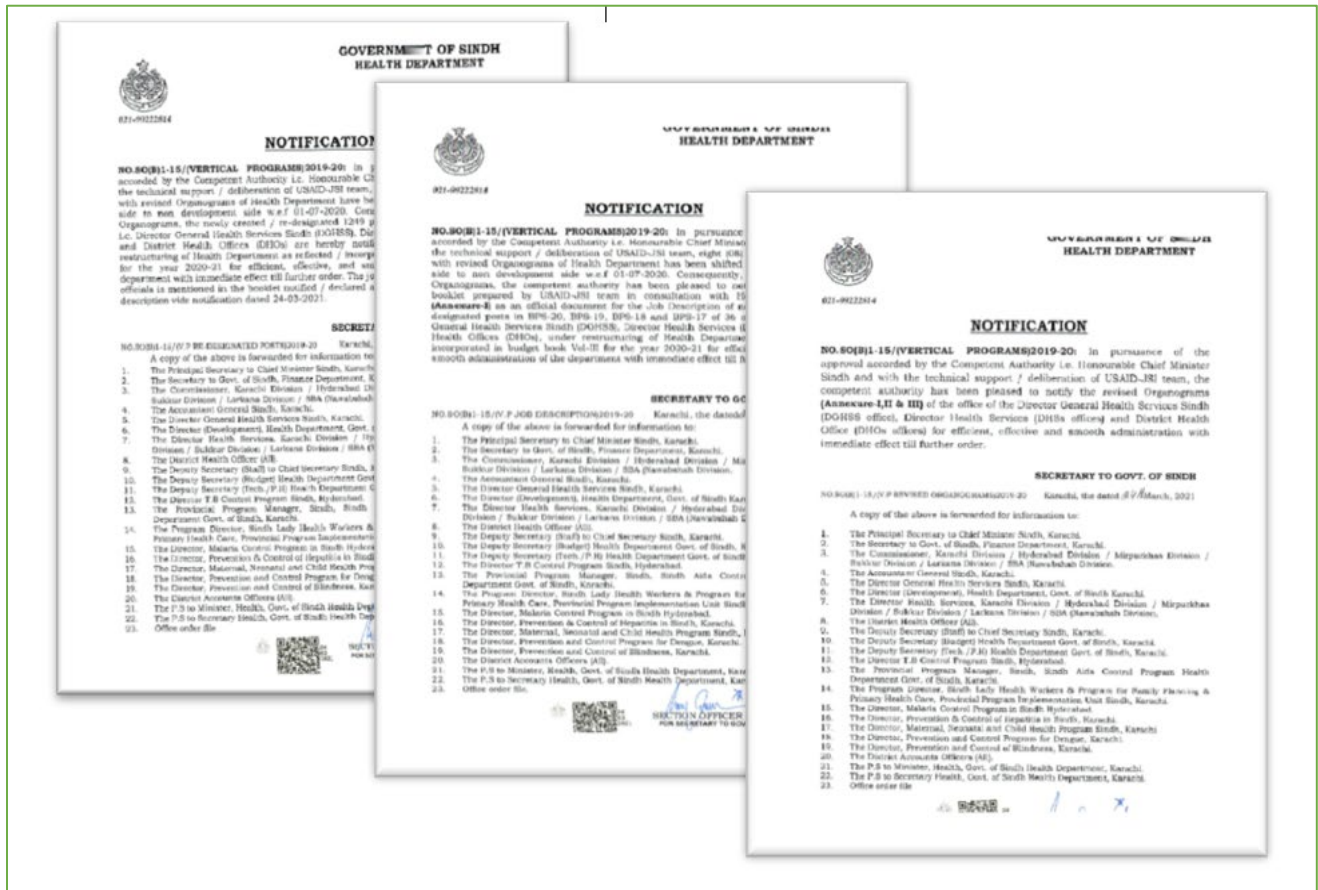


Figure 7: Notification of DOH Sindh about re-structuring of 8 vertical programs

c) Strengthening of Health Facilities with Improved Readiness

**Refurbishment and Strengthening of Seven Hospitals in Khyber Pakhtunkhwa**

Seven hospitals in three districts were refurbished with non-structural works and strengthened for improving the state of readiness. These hospitals were:

- THQ Shabqadar
- DHQ Charsadda
- DHQ Lakki Marwat
- City Hospital, Lakki Marwat
- THQ Khwazakhela, Swat
- THQ Hospital Matta, Swat
- Saidu Teaching Hospital, Swat

The critical areas strengthened in these hospitals included:

- Accident and Emergency
- Outdoor Patient Clinics
- Operation Theatre

- Labor Room
- Gynae/Paeds Wards
- Laboratory

Moreover, new units were established with the IHSS-SD support (i.e., three Sick Newborn Care Units and seven Well Baby Clinics [one in each of the above hospital]). State of the art equipment and necessary furniture was also provided to these health facilities. All assets provided were entered in the newly introduced Asset Management Information System developed by Chemonics. All the refurbished areas were handed over to the respective hospital administration.

### **Provision of essential MNCH equipment to 180 primary health care facilities of Khyber Pakhtunkhwa**

IHSS Activity trained more than 4,000 health care providers in the primary health care (PHC) facilities of three selected districts of KP. Further to this support, the project provided 81 essential items of MNCH equipment to 180 PHC health care facilities. With training complete and the latest equipment supplied, it is expected that quality of services at the point of care will improve significantly.

### **Upgrading the Clinical Laboratory at Chandka Medical College Hospital, Larkana**

IHSS-SD Activity has provided support to strengthen diagnostic services at the Chandka Medical College Hospital (CMCH), Larkana. The support included refurbishment works and installation of required equipment. On September 14, 2021, a handover ceremony of the clinical laboratory was held at CMCH, Larkana.

Strengthening the laboratory will provide diagnostic services, not only for the 1.6 million population of Larkana district but also to the adjacent district populations. This will also discourage the expensive diagnostic solutions incurred by patient referrals to major cities of Sindh and to private-sector laboratories.

### **Quality of health services**

#### **a) Capacity building**

IHSS-SD Activity continued with the capacity building of facility and community-based health care providers in this reporting year. Following trainings were held with the aim to improve skills and competencies of the staff working in the public sector hospitals.

#### **Integrated Management of Newborn and Childhood Illnesses Training:**

IHSS-SD conducted a six-day training on Integrated Management of Newborn and Child Illnesses (IMNCI) at Benazir Bhutto Shaheed Hospital, Abbottabad. Twenty participants, including lady health visitors (LHVs), paramedics, and doctors from Lakki Marwat attended the training.

#### **Training on Infant and Young Child Feeding**

During this year, IHSS-SD conducted a five-day combined course on growth assessment and infant and young child feeding (IYCF) for 35 health care providers in two groups from Lakki Marwat. The training was held at City Hospital Lakki Marwat. See table 7.

**Table 7. IYCF Trainings from October to December 2020**

District	Training Batches	No. of Participants	Dates (2020)
Lakki Marwat	1	16	Oct 14–18
Lakki Marwat	1	19	Oct 19–23
<b>Total</b>	<b>2</b>	<b>35</b>	

### Community Based IMNCI Training for LHWs and LHSs

In PY3, a six-day training on IMNCI was delivered at District Headquarters (DHQ) Hospital Charsadda. The training was delivered in two groups and 256 LHWs/LHVs were trained. See table 8 for details:

**Table 8. Community IMNCI Trainings from October to December 2020**

District	Training Days	No. of Participants	Date (2020)
Charsadda	6	13 (LHVs)	Oct. 23–28
Charsadda	6	243 (LHWs)	Oct. 28–Nov. 3
<b>Total</b>		<b>256</b>	

In the second quarter of the reporting year, the IHSS-SD team conducted a few IMNCI trainings:

#### Sick Newborn Care Unit Training:

IHSS-SD conducted a six-day training course on sick newborn care for 19 participants from THQ Hospital Matta, THQ Hospital Shabqadar, Charsadda, and DHQ Hospital Lakki Marwat. This training was held at the Children Hospital of Pakistan Institute of Medical Sciences (PIMS), in Islamabad from March 29–April 3.

#### b) Centers of Excellence for MNCH Training

As part of IHSS-SD’s Human Resource Capacity building efforts, the program has established four COEs for clinical training in MNCH. Activity has procured equipment for these skills labs established in District Headquarters Hospital in district Charsadda, City Hospital in Lakki Marwat, Saidu Sharif Hospital in Swat, and Molvi Ameer Shah Hospital, Peshawar. IHSS-SD Activity developed these COEs based on the program’s training approach for building the capacity of adult learners through standardized clinical skills. Standardization of competency-based education requires a synchronized training approach from classroom trainings to acquisition of skills on simulators. After achieving competency on models, the learner can use the clinical site to practice the same skills in real life. Therefore, each COE has been equipped

with classroom facility, MNCH/FP skills lab, and clinical site in the same vicinity. Through this support, IHSS-SD Activity created a conducive learning environment, and also provided a pool of master trainers with the practical equipment to train various service providers.

### c) Quality Improvement

To improve the quality of service delivery at the refurbished health facilities, the IHSS-SD Activity is adopting a simple step-wise approach for quality improvement (QI) at the point of care, focusing on the care of mothers and newborns.

IHSS-SD team reinstated the QI committees to support health facilities in the districts of Charsadda, Lakki Marwat, and Swat. The purpose of reinstating these committees is to improve the quality of maternal and newborn health services.

The IHSS-SD team met with the administration of these health facilities. As a result, terms of reference were developed for QI committees and nominations of members for the QI committee were finalized and notified.

### Development of quality improvement plans

The aim of QI plan development is to address key challenges/issues related to maternal and newborn health that impact quality services. The QI committee members selected thematic areas on which they would like to develop and focus their QI plans, with a simple implementation approach within hospital budgetary resources.

Because these committee members belong to multiple disciplines representing departments of gynecology, pediatric, pharmacy, infection prevention, diagnosis, and nursing, their ownership and commitment will help improve not only the quality of services, but also patient satisfaction and regaining patients' trust in the government health facilities. See table 9.

**Table 9: The QI Committee Orientation Session/Meetings Held (July–September 2021)**

S#	District	Name of Facility	Identified Key Areas to Develop QI Plans
1	Lakki Marwat	City Hospital, Lakki Marwat	Improving the skills and knowledge of health care providers to deliver the following services: <ul style="list-style-type: none"> <li>● Infection prevention and control (IP&amp;C)</li> <li>● Management of post-partum hemorrhage</li> <li>● Helping babies breathe</li> <li>● Cord care with chlorhexidine</li> </ul>
2	Lakki Marwat	District Headquarters Hospital (DHQH), Lakki Marwat	Increasing coverage of vitamin K to newborns
3	Charsadda	DHQH, Charsadda	Implementing IPC protocols around birth



4	Swat	Saidu Group of Teaching Hospitals (SGTH), Swat	Controlling hypothermia in newborns
5	Swat	Tehsil Headquarters Hospital (THQH), Matta	Initiating breastfeeding

#### d) Supportive Supervision

To mentor and supervise the trained health care providers working in the refurbished health facilities of KP, IHSS-SD operationalized supportive supervision. The IHSS-SD team conducted visits and developed specific checklists to assess the knowledge and skills related to antenatal, natal, postnatal care, and family planning as follows:

- pregnancy, childbirth, postpartum, and newborn care
- managing complications of pregnancy and childbirth
- immediate post-partum family planning

The trained health care providers include women medical officers, LHVs, and staff nurses. To improve their service delivery skills, all health care providers were mentored in key competencies in areas which they were found to be weak. A total of 118 health care providers were mentored in all three districts as described in table 10:

**Table 10: Supportive Supervision Provided to Health Care Providers (July–September 2021)**

District	Health Facility	Number of Health Care Providers Mentored
Swat	SGTH	32
	THQH Matta	19
	THQH Khawazakhela	12
Charsadda	THQH Shabqadar	6
	DHQH Charsadda	27
Lakki Marwat	City Lakki Marwat	16
	DHQH Lakki Marwat	6
Total		<b>118</b>

e) Improving Access for Basic Health Services: Mobile Health Service Units

The IHSS-SD technical team conducted 42 camps, including 14 camps in each of three intervention districts. In all, 4,207 women and 4,285 children attended these camps and used the various services; 8,492 beneficiaries used the maternal and child health services: 2,826 in district Charsadda, 2,947 in district Lakki Marwat, and 2,719 in district Swat. See table 11.

**Table 11: MHSU Camps from October 1–December 31, 2020**

	Total Number of Clients			
	Charsadda	Lakki Marwat	Swat	Total
Total camps	14	14	14	42
Total OPD	2,826	2,947	2,719	8,492
Women	1,608	1,410	1,189	4,207
Children	1,218	1,537	1,530	4,285

Since June 2021, the MHSUs have been used to improve outreach COVID-19 vaccination in the three IHSS-SD districts in KP. During the reporting period, 58,262 people were vaccinated through this activity. It is heartening to know that participation of women and men was equal as observed in the static vaccination centers. Keeping this view, the DOH has developed an extensive COVID-19 vaccination plan with enhanced focus on outreach.

Civic Engagement

a) Health Awareness Sessions with Communities

IHSS-SD continued to conduct health awareness sessions for the visitors during MHSU camps in the first quarter of the reporting year. There were separate awareness sessions for male and female community members on maternal newborn child health, family planning, basic health rights, and child health and nutrition. More than 7,000 beneficiaries attended these sessions (see table 12):

**Table 12: Community Health Awareness Session (October–December 2020)**

District	No. of CRPs	Male	Female	Total Beneficiaries
Charsadda	98	633	1,947	2,580
Lakki Marwat	60	671	1,669	2,331
Swat	70	609	1,565	2,174
<b>Total</b>	228	1,913	5,181	7,085

b) Hygiene and Handwashing Sessions with Communities

Awareness sessions on hygiene and handwashing under the IHSS-SD Activity started before COVID–19, mainly targeting schools. These sessions aimed to inform people about the 10 steps

of handwashing with soap, the importance of latrines, and the purification of water at the household level to prevent diseases. After the school hygiene awareness activities were completed, these sessions incorporated the MSHU camp activities in the districts of Charsadda, Lakki Marwat, and Swat. In this reporting quarter, many community members attended handwashing awareness sessions. The details of the sessions are presented in table 13.

**Table 13: Awareness Sessions Conducted on Handwashing and Hygiene in All Districts**

<b>District</b>	<b>No. of CRPs</b>	<b>Sessions</b>	<b>Beneficiaries</b>
Charsadda	98	37	2,396
Lakki Marwat	60	55	1,359
Swat	70	270	2,146
<b>Total</b>	<b>228</b>	<b>362</b>	<b>5,901</b>

#### c) Hygiene and Handwashing Sessions in Primary Schools

IHSS-SD teams visited partner schools that had been supported throughout the Activity's community component. The IHSS-SD team continues to follow up sites to review the impact of former education and hygiene training, including any progress of the hygiene clubs at the schools. These sessions helped children understand the 10 steps of handwashing with soap and the role they can play when taking responsibility for hygiene and infection control. See table 14. IHSS-SD teams also distributed soap to schools. A total of 115 partner schools were visited during the reporting year.

**Table 14: Awareness Sessions Conducted on Handwashing and Hygiene in All Districts (October 2020–September 2021)**

<b>District</b>	<b>No. of Schools Followed Up/Visited</b>	<b>No. of Soaps Distributed</b>
Charsadda	29	9,864
Swat	34	3,000
Lakki Marwat	52	15, 671
<b>Total</b>	<b>115</b>	<b>28,535</b>

## Governance and Accountability

### a) Monitoring and Supervisory System

IHSS-SD Activity provided technical support to the health department, KP to design a monitoring & supervisory (M&S) system for service delivery from the district and/or provincial level. The goal of supervision is to promote an efficient, effective, and equitable health care delivery system. Supportive supervision will promote quality of care at all levels of the health system by strengthening relationships within the system and focusing on identifying and resolving problems. The supportive supervision includes quality checks of reporting and recording: data transfer is rechecked, and some elements of the monthly reports are recalculated.

The supervisory system involves identification and discussion of challenges in data management and provides opportunities for learning.

After the successful implementation of the M&S system in the three selected districts of IHSS-SD Activity, it has been scaled up in all the districts of the province. The SOPs were developed for conducting the M&S visits. The visits are in line with the plan prepared by the district manager and approved by the DHO. The M&S tools/checklists are also standardized and are part of the online M&S system. These standardized checklists, with user guidelines, have been developed for all vertical programs, as well as integrated checklists for the use of district health officers, managers of the directorate general health services, and managers at the secretariat level.

A one-day training was conducted for health managers on the use of the M&S system, focusing on developing field plans, online reporting of field visits, and submission of reports. The districts managers—District Health Officer, Deputy District Health Officer, district health information system (DHIS) coordinator, focal person MNCH, LHW, Expanded Program on Immunization, nutrition, malaria, and TB—participated in the training.

The figure below shows the monthly field visits planned versus visits actually conducted by the program managers.

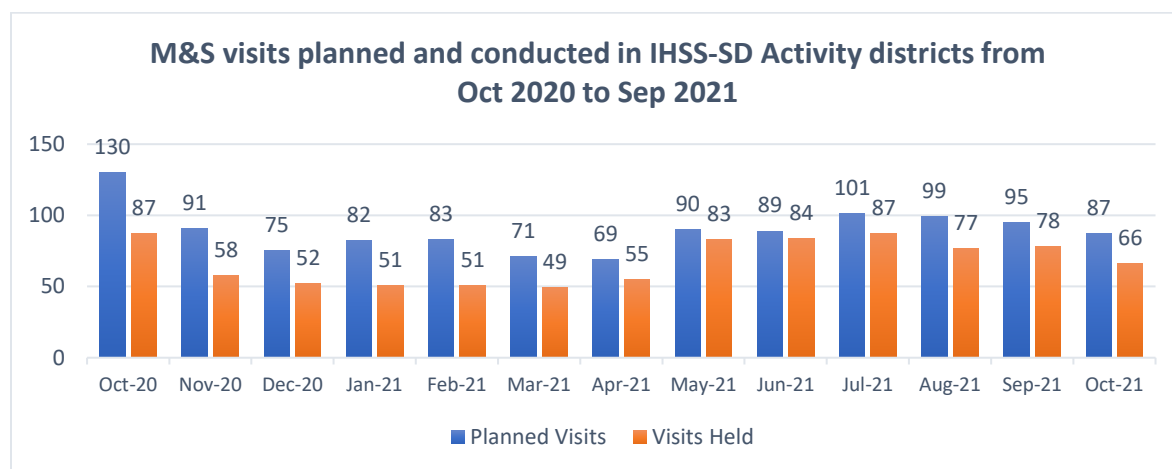


Figure 8: Graph showing number of M&S visits planned vs. conducted in the reporting quarter.

The performance of district managers was acknowledged by the DGHS office through a certificate of appreciation.

#### b) KP Integrated Management Information System for Health

The integrated dashboard for KP monitoring and evaluation (M&E) and key performance indicator's (KPI) dashboard is online on the government's KP servers and linked with the DHIS official website. The dashboards can be accessed via the DHIS website using the link <http://dhiskp.gov.pk>

At the request of Secretary Health Government of KP and DGHS in October 2020 for KPIs dashboard, the IHSS-SD, with support from USAID, started a series of consultations with the districts, provincial program managers, provincial directors, and DGHS to finalize the list of KPIs, data source, weightage of each indicator, and frequency of reporting. A total of 32

indicators for the DHO performance and 19 indicators for the medical superintendent of hospital performance were finalized. This integrated dashboard and KPIs were approved by the Minister of Health and Secretary of Health KP.

In September 2021, the beta version of the software was demonstrated and approved by DGHS, and, at his request, all provincial and district managers were given orientation. Accordingly, five orientation sessions were organized on a regional basis for district managers on KPIs and integrated MIS dashboards. A total of 106 participants were trained in five groups during September 2021.

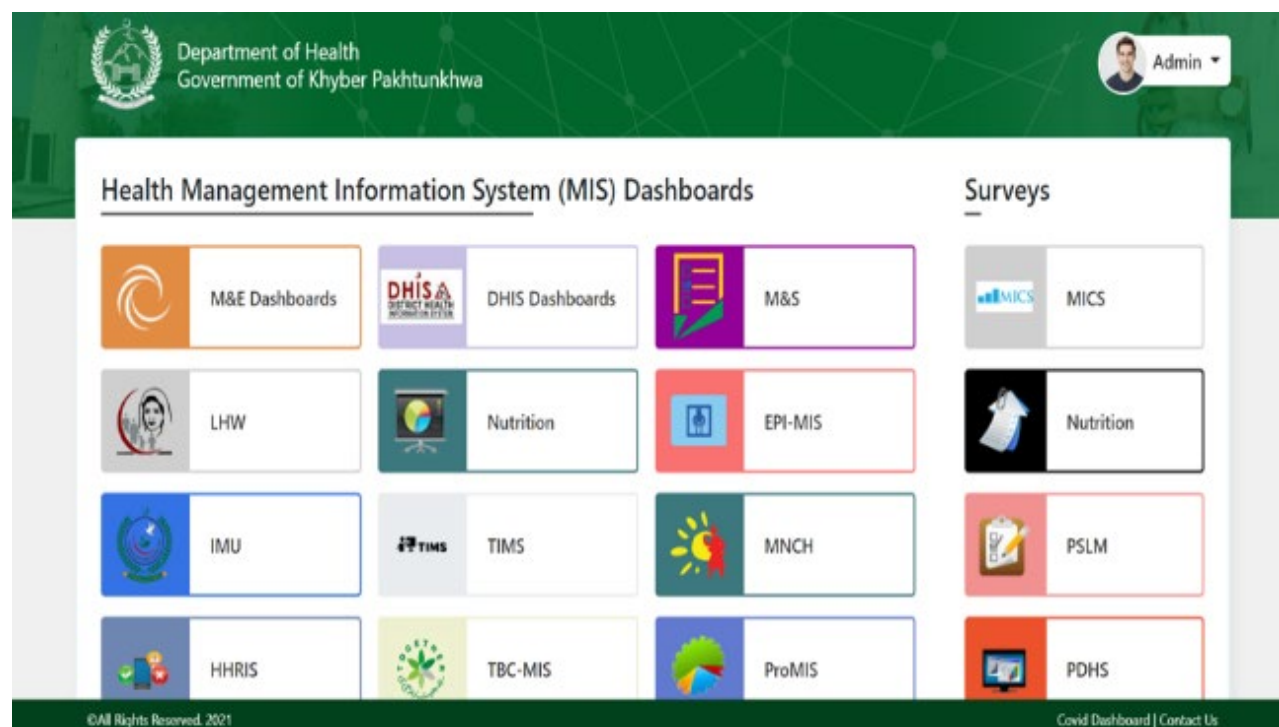


Figure 9: Snapshot of the Integrated MIS/dashboard developed with the support of IHSS-SD Activity.

### c) Scaling up of LHW-MIS in All the Districts of KP

In the PY3, the IHSS-SD Activity, in consultation with the LHWs program, scaled up LHW-MIS in all the districts of KP. The district coordinators and assistant district coordinators have been trained to analyze monthly performance data. The data entry operators and lady health supervisors were trained on data entry. Overall, the IHSS-SD Activity trained 670 Lady Health Supervisors (LHS) and 30 district coordinators and 30 data entry operators. Because of certain administrative challenges (e.g. division/bifurcation of districts, creation of login/password for each LHS etc.), these LHSs will only be able to start entering monthly performance data of the LHWs using computers at the M&E cells from January 2022.

## Activity Monitoring, Evaluation and Learning Plan (AMELP)

The IHSS-SD Activity developed the AMELP at the beginning of the project and updated it every year, based on the proposed activities. For the reporting year, the AMELP is being updated and will be submitted to USAID for approval. The AMELP outlines the types of information the Activity will collect to make informed decisions for routine Activity management, for answering questions from the learning agenda, and for describing the specific contributions of the Activity. The following are the guiding principles for IHSS-SD Activity:

1. The AMELP is a self-assessment tool during the course of Activity implementation. It outlined specific routine indicators and tools to be used by the project. It also enabled the IHSS-SD Activity team to actively and systematically assess progress toward achieving targets.
2. The IHSS-SD Activity AMELP was designed to inform management decisions at all levels. The Activity collected data on the MNCH reporting indicators to USAID.
3. The IHSS-SD Activity AMELP is implemented using a participatory approach with the Activity team by designing recording and reporting system of all interventions, as well as provincial/district health teams and departments of health. IHSS-SD collaboratively worked with all key stakeholders to ensure harmonized approaches to monitoring and evaluation.
4. The IHSS-SD Activity AMELP enabled the IHSS-SD Activity to monitor and evaluate Activity performance against the stated objectives/targets, thereby holding ourselves accountable to the DOH, USAID, and other stakeholders.

Given the complexity of health systems strengthening interventions, the IHSS-SD AMELP was designed to capture not only the effectiveness of one activity, or intervention, but also systemic and contextual changes occurring through other health systems strengthening functions. Monitoring the IHSS-SD Activity comprehensively mandated the Activity to examine contextual and system-wide issues that are shaping the successful implementation of project activities and outcomes.

## Implementation Challenges and Solutions

Issues/Challenges	Solutions
1. Conducting workshops at the provincial level to develop QI plans in IHSS-SD-supported hospitals in KP. The staff were not allowed to leave their work stations due to the COVID-19 vaccination campaign in the districts.	The IHSS-SD team decided to travel to the districts instead of inviting the health care providers and conducted orientation session/meeting to develop QI plans.
2. Availability of IHSS-SD trained health care providers in the 7 selected hospitals of KP. The health care providers were posted in different high-dependency units due to the COVID-19 pandemic disease burden in large cities. This	Supportive supervision was provided to those health care providers who were available in hospitals on the day of visit.

Issues/Challenges	Solutions
affected their availability for supportive supervision sessions and the practical use of their learned MNCH-related skills in their original place of posting.	
3. Several planned trainings on the LHW-MIS and M&S system were postponed due to the second and third wave of COVID-19 and vaccination drives. The DHOs and relevant staff were busy in daily meetings with DGHS in reviewing COVID-19 data, monitoring vaccination progress, and focusing on patients in the hospitals.	Worked to get a buy-ins from all six provinces/regions through online meetings with the secretaries and director generals.
4. Schools activities were stopped because of lock down; where the schools were open, activities were conducted with SOPs.	Strictly followed COVID-19 SOPs of using masks, social distancing, etc.
5. Some staff tested positive for COVID-19, which required contact tracing, cleaning of offices, and quarantine at home for 14 days.	Adjusted the implementation of all activities to respect the COVID-19 preventive measures (i.e., code of conduct among staff, partial office close, virtual meetings, and rescheduled the trainings).
6. Implementing activities in Mohmand district remained a challenge mainly because of its location at Af/Pak border and the security concerns.	IHSS-SD team convinced the health department to conduct MNCH trainings for Mohmand health facilities' staff in Peshawar at the newly established Center of Excellence at Molvi Ameer Shah Hospital (supported by USAID). DOH agreed and trainings will commence in the next quarter.
7. During the initial first phase of implementation of power back-up solution through solar energy, the onsite installation faced a few challenges with respect to the required safety standards in place for the electrical and other installation requirements.	To address this challenge, a pre-installation survey was conducted. This process took additional time in implementing this activity, as it required extensive coordination with the vendors to modify their contracts for the additional requirements. Installation of solar power back-up systems is now in progress.
8. Changes in the leadership of the DOH (i.e., Minister) and transfers of senior staff members	Presentations were made again to the new officials joining the department to explain the project progress and activities.

Issues/Challenges	Solutions
created the need for the Activity staff to present our work again to the new officials.	
9. Incomplete data, such as missing addresses and contact details of existing TB cases registered with the TB Control Program, remained a challenge in reaching out to these cases in the community. The issue is found in all three districts of activities in KP.	The issue has been discussed with the Provincial and District TB Control Programs in the Inter-District Quarterly Review Meetings. Basic management unit staff took the responsibility to update contacts' data. Due to these efforts, new data were recorded properly while previous data were updated.
10. A new electric transformer was needed for functionality of the installed machines at the clinical laboratory in Chandka Medical College Hospital. The IHSS-SD team wanted to be confident that required power is available at the laboratory to ensure smooth utilization of the provided equipment. For this reason, the handing over of the laboratory was also delayed.	With the efforts of the IHSS-SD team and collaboration with the district and provincial health departments, a demand note for a transformer was approved and an amount for the transformers was allocated by the DOH and transferred to the medical superintendent's account at the hospital.
11. To improve case detection of drug-resistant TB the TB Control Program KP requested the shifting of the new Gene-Xpert machine installed at THQH Matta to Civil Hospital Kalam, while the other machine installed at PMDT Saidu to be shifted to THQ Khwazakhela because of more caseloads reported at these sites.	Meetings were held with the Provincial TB Control Program and the district health authorities. After receiving approval from the relevant stakeholders, the machines were shifted. The vendor was requested to reinstall the machines at the new locations along with the accessories.
12. DGHS KP and his technical team were delayed in approving the KPI dashboard. The delay was due to the busy schedule of the senior management of the DOH in the third and fourth wave of COVID-19. Also, the process of getting the access codes and APIs from the DOH for different MISs with different database administrators also delayed finalizing KPIs and the integrated MIS dashboard. The delay in completion was impacting our project outcome in scheduled achievements, which was due in Q3.	Several rounds of meetings with DGHS, director DHIS, and provincial program managers were conducted to address the issues. Finally, on approval of DGHS, APIs and access codes of the MISs were retrieved. Upon request, orientation sessions were organized for all DHOs of the province, including the medical superintendent of the hospitals and DHIS coordinators. Four ADGs, provincial directors, and provincial managers, were also given orientation on these dashboards.