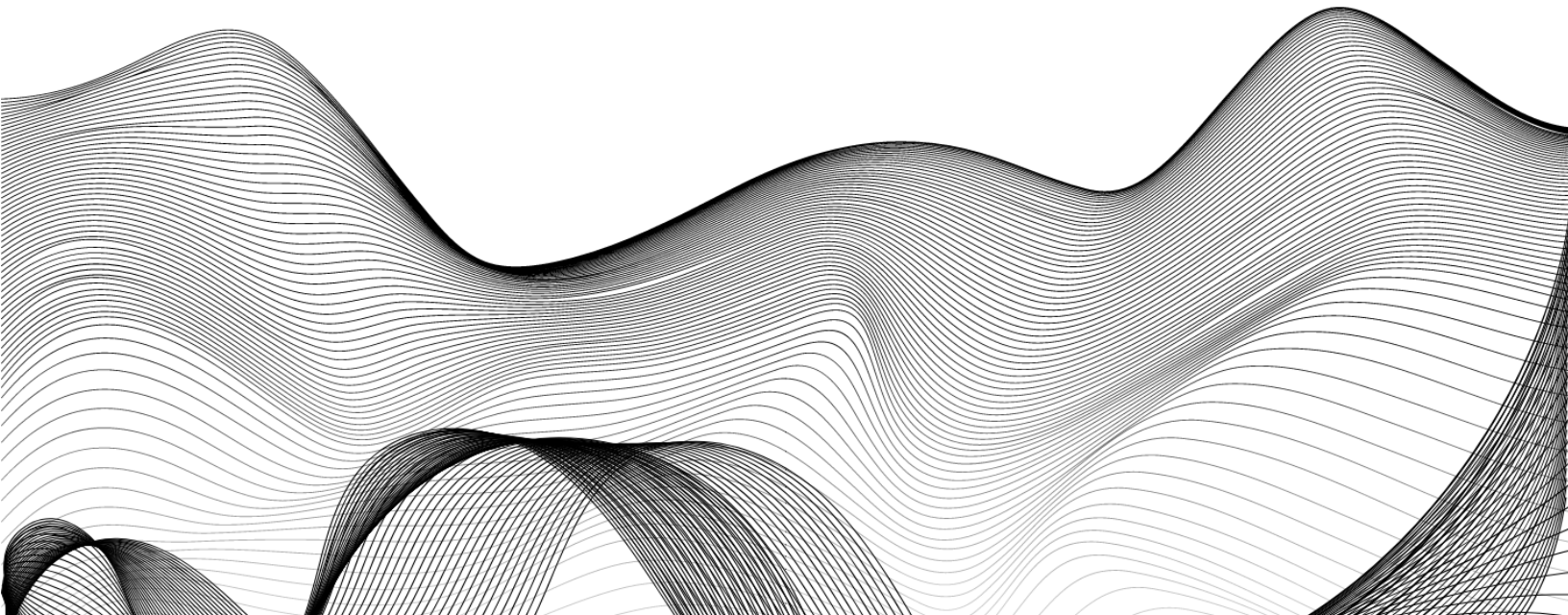
HEALTH DEPARTMENT
GOVERNMENT OF SINDH

COMPETENCIES AND SKILLS BASED TRAINING SYSTEM



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Introduction

The National Health Support Program, also known as NHSP, a flagship initiative supported by the World Bank and other donor organizations, has been established with the aim of strengthening Pakistan's Primary Health Care (PHC) systems and expediting progress towards achieving universal health coverage (UHC).

Nine disbursement Linked Indicators (DLIs) have been established under the NHSP, each encompassing annual objectives referred to as Disbursement Linked Results (DLRs).

DLI 2 pertains to the primary healthcare providers delivering quality essential health services, including in lagging areas. This will help in enhancing the skills and competencies of these providers. Additionally, it aims to raise awareness within the community about health impacts related to climate. This competency-based training framework shall directly contribute towards the achievement of the DLI 2.

The Disbursement Linked Results (DLRs) outlined for DLI 2 are as follows:

Year 1: The DLR for Competency based training system developed for female PHC providers to deliver MNCH, based on approved framework, modules and monitoring tools.

Year 3: 25% of trained PHC providers delivering MNCH care per guidelines, of which at least 20% are in lagging areas.

In order to streamline the competency-based training system, the following shall be implemented in a phased manner:

- Implementation of the framework, and updating of modules, job-aids and other relevant tools as per requirement of the Government of Sindh.

- Institutionalization of competency-based training framework, ensuring that all the primary care programs follow the framework for cross-program synergies and avoidance of duplication.
- Conducting a training needs assessment, which includes evaluating the knowledge of providers using vignettes and assessing their skills through direct observations so that targeted trainings and refreshers can be planned and rolled out as and when required.

This document presents an expanded deliverable and the vision of Government of Sindh, outlining competency-based training system designed specifically for Primary Healthcare (PHC) providers. An important element of this framework shall be the training management system that will equip the primary care providers and front-line workers with the necessary knowledge, skills, and tools to deliver high-quality primary health care services in general, and RMNCAH, family planning and nutrition services in particular.

Background

Women occupy positions such as nurse, community midwife (CMW), and Lady Health Worker (LHW), with less than half of doctors being female, certain regions in Sindh face a critical shortage of qualified personnel, reaching up to 50 percent. Rural areas encounter challenges due to insufficient healthcare providers, coupled with issues like high absenteeism rates, low retention in remote areas, and inadequate support mechanisms for staff, including poorly coordinated supervision. Additionally, there is a misalignment between the scope of work for providers and the delivery of the Universal Health Coverage (UHC) benefits package (BP).

The underlying causes of weak human resource (HR) management include the absence or fragmentation of HR Management Information systems, HRMIS suboptimal working conditions (including inadequate accommodation and security concerns, disproportionately affecting female workers), and low motivation within certain cadres due to delayed payments and a lack of clear career pathways.

Service delivery stands as a foundational element within the healthcare system, and ensuring the provision of high-quality services necessitates the establishment of a robust training system. Training assumes a pivotal role in enhancing the quality of healthcare by keeping the primary care workforce well-informed about the swiftly evolving technological and medical landscape, the escalating demand for high-quality healthcare, and the available resources. Investing in the training and development of staff brings about significant benefits, particularly in terms of enhancing patient care and satisfaction.

Within the National Health Services Program (NHSP), Delivery Area 2 (DLI 2) focuses on enhancing service providers' competencies and skills through a comprehensive training system, aiming to elevate the overall quality of healthcare services.

There is presently no system of delivery of training and neither is there a system to track the trainings that are being conducted, these are carried out on an ad-hoc basis. There is a need to streamline the training for all cadres and to increase the pace and quality of training as the scope of work, competencies, and skills of PHC providers have not been updated.

PHC providers include those at the community level (e.g., vaccinators, LHWs) as well as those attached to the BHUs and RHCs. Select essential health services are based on prioritized set of services that include immunization, FP, maternal and newborn care, mental health, and nutrition counselling. Establishing a comprehensive training system and a concurrent training management system that would focus on clarifying the scope of work and aligned with improved competencies and skills of front-line providers to deliver these services, which will include skills related to gender-sensitive and gender-responsive communications and counselling (i.e., use of destigmatizing and non-discriminatory language that addresses the needs and barriers faced by women in particular, treats them with respect, and gives them choices and options). It also goes beyond ad-hoc training, by institutionalizing competency-based training and focusing on improvements of providers in adhering to protocols and guidelines.

This system will help in creating relevant technical expertise, competencies, and skills, by helping in evidence-based decisions to strategically manage HR and creating an inclusive working environment where staff are engaged, continuously develop professionally, and perform at their best.

Milestones

The following are the milestones pertaining to the primary healthcare providers delivering quality essential health services;

1. **Review and update the available existing guidelines, training manuals, and monitoring checklists**

   The emphasis is on a comprehensive examination of all existing guidelines, training materials, and monitoring tools related to Maternal, Newborn, and Child Health (MNCH) and other key training areas. This involves a systematic and thorough review to ensure that the content is up-to-date, medical evidence-based, and aligned with the latest clinical practices and national standards.

   Any outdated or inaccurate information will be revised and updated. The goal is to create a robust set of resources that serve as the foundation for training and monitoring in the MNCH and other key sectors of healthcare service delivery.

2. **Coordinate with public and private academia and provincial team for MNCH related trainings**

   Collaboration with public and private academia is crucial for the development and delivery of effective MNCH-related training. It involves establishing partnerships with academic institutions including Society of Obstetricians & Gynecologists of Pakistan (SOGP) and College of Physicians and Surgeons Pakistan (CPSP) to access expertise, educational resources, and faculty who can contribute to the training programs.

   Furthermore, coordination with the provincial teams is essential for aligning training efforts with local healthcare priorities and ensuring that the training programs meet the specific needs of Sindh province.

3. **Review and develop JDs of staff at health facility level**

   It focuses on the job descriptions (JDs) of healthcare staff working at the health facility level. The objective is to review and update these JDs to clearly define the roles, responsibilities, and competencies expected of each position. This process ensures that staff members understand their duties and that their roles are in alignment with the goal of providing high-quality MNCH and other essential services.

   Developing clear JDs is an important step that can also help with recruitment, performance evaluations, and career progression.

4. **Assess training needs of SBAs, WMOs, LHWs and develop a training plan to improve essential skills on safe deliveries, ANC, PNC & FP**

   It involves a comprehensive assessment of the training needs of various healthcare providers, including Skilled Birth Attendants (SBAs), Women Medical Officers (WMOs), and Lady Health Workers (LHWs). The assessment will identify gaps in their knowledge and skills related to safe deliveries, Antenatal Care (ANC), Postnatal Care (PNC), and Family Planning (FP). Based on the assessment findings, a tailored training plan will be developed. This plan will outline the content, delivery methods, and schedule for training sessions designed to enhance the essential skills of these healthcare providers, ultimately improving the quality of MNCH services they offer.

Training Framework

The competency-based training system adheres to a well-established framework that guides the structure and content of the program. The framework incorporates the latest guidelines and best practices in primary care, with a focus on gender-sensitive and evidence-based approaches. The framework revolves around the following key elements:

Gender Sensitivity and Responsiveness

Recognizing the unique needs and challenges faced by women and children in the healthcare system, the framework prioritizes gender-sensitive care. A gender-responsive communications and counselling ensures use of destigmatizing and non-discriminatory language that addresses the needs and barriers faced by women, treats them with respect, and gives them choices and options.

Evidence-Based Medical Practices

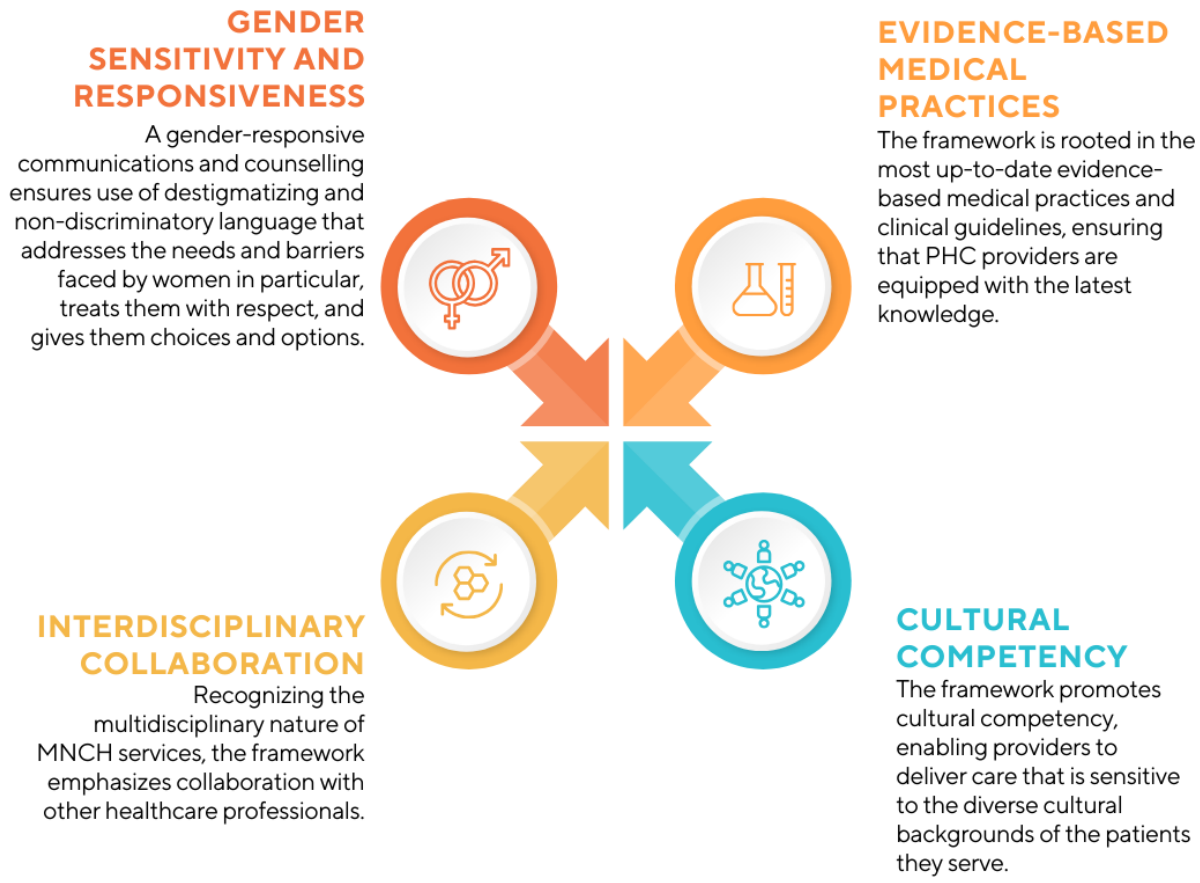
The framework is rooted in the most up-to-date evidence-based medical practices and clinical guidelines, ensuring that PHC providers are equipped with the latest knowledge.

Cultural Competency

The framework promotes cultural competency, enabling providers to deliver care that is sensitive to the diverse cultural backgrounds of the patients they serve.

Interdisciplinary Collaboration

Recognizing the multidisciplinary nature of MNCH services, the framework emphasizes collaboration with other healthcare professionals.



A well-developed training platform is a dynamic and evolving system that considers the specific needs of participants, optimizes the training schedule, prevents duplication, implements rigorous monitoring and evaluation processes, and strategically schedules refresher trainings. By carefully considering these aspects and utilizing a robust HRMIS housed at the **Project Management Unit (PMU) of the Department of Health, Government of Sindh**, can ensure that their training initiatives are targeted, efficient, and adaptive to evolving needs.

Training Plan

The training plan encompasses a thorough compilation of service delivery cadres slated for training, the administration process, the technology to be employed during training sessions, the content of the training modules, the required infrastructure for conducting training sessions, seamless integration with HRMIS and DHIS2 LMS, and the establishment of a comprehensive trainee feedback mechanism.

Service Delivery Cadres to be Trained

Every cadre involved with service provision, or support services for the primary care service delivery shall be trained on the relevant competencies required for effective performance of their duties in accordance with their job descriptions (JDs). A brief of the cadres is attached as a table below.

Cadres to be trained
Lady Health Workers (LHW)
Lady Health Supervisors (LHS)
Lady Health Visitors (LHV)
All Doctors (MO/WMO)
Nurses
Community Midwife (CMW)
CDC Supervisors
Sanitary Inspector
Nutrition Assistant
Medical Assistant
Computer Operator
Storekeeper

The cadres proposed are not limited to core service provision, but also include support services like security guards, janitorial staff, and ambulance drivers.

A certain set of trainings shall be applicable to all cadres and those include:

1. Client center approaches
2. General awareness about various health services provided at the primary care level
3. Value clarification on sensitive topics like reproductive health, adolescent health, family planning, etc.
4. Sensitization trainings on gender related issues.
5. Basic life support training

It shall be ensured that all the trainings not only cover the interaction with female clients, but also the interactions and power dynamics among male and female health workers. In the health system, men are dominant in more powerful and better paid positions, as well as higher level professional cadres. Gender-responsive professional interactions, no tolerance for harassment or abuse, etc. shall be part of trainings for all cadres.

Moreover, cadre specific training shall be applicable to relevant cadres. As an example, the vaccinator shall be trained on knowledge and skills required for provision of quality immunization services, and the Lady Health Visitors shall be trained on knowledge and skills required for provision of FP, RMNCAH and nutrition service.

It is, once again, reiterated that while these trainings are already being implemented on as-per-need basis, they need to be standardized in terms of approach as well as content. This framework shall ensure that this uniformity is achieved across all trainings, irrespective of the sponsoring bodies / TA partners.

Administration of the Training

Administration of the training shall be the responsibility of the relevant management units at the provincial level. **These management units will serve under the Project Management Unit (PMU) of the Government of Sindh with support from the technical wing of the DGHS.**

The technical program responsible for the training shall ensure the availability of training need assessment, scope of work / purpose of training, defined funding source(s), participant selection, and relevant notifications

1. **Participant Selection**

   The first step in developing an effective training system is to establish clear criteria for selecting participants. This involves determining who will be trained and ensuring that the training is appropriate for their cadre. To achieve this, it's essential to conduct a needs assessment to identify gaps in knowledge and skills among the target audience. Conducting a comprehensive needs assessment can help identify specific areas where training is most urgently required. This will involve surveys, interviews, or other methods to gather information about the skills and knowledge gaps among healthcare staff.

   The methodology to identify staff for in-service training involves a systematic approach that considers various factors. The selection criteria will be based on these needs and include factors such as scope of work, experience level, and performance evaluations. It's crucial to ensure that those selected for training are the individuals most likely to benefit from it and apply their acquired skills and knowledge in their roles.

   Staff who are *three or more years beyond their initial pre-service training* will be considered for in-service training. The goal is to ensure that training remains relevant and addresses the evolving needs of healthcare practice. *Staff members who have not undergone any refresher training in the last five years* will also be prioritized for in-service training. This

approach helps in identifying individuals who can benefit from updating their skills and knowledge.

A *staggered rollout of training* will be implemented based on factors such as district, and cadre, this phased approach allows for a more organized and manageable implementation, considering the diverse needs and contexts across different areas. *Priority will be given to lagging districts*. *Certain cadres or categories of healthcare workers are be identified as high-priority based on the critical nature of their roles.* For example, frontline healthcare providers dealing with maternal and child health (e.g. Lady Health Workers and Community Midwives) will be prioritized due to the dismal state of maternal and child health indicators in the region.

Involving healthcare staff in the decision-making process can provide insights into their perceived training needs and preferences. This participatory approach can enhance the relevance and acceptance of the training programs.

Consideration should be given to the availability of resources, both in terms of funding and training facilities, when planning the rollout of in-service training.

2. Trainer Selection

A single trainer is not sufficient for conducting trainings across all cadres, as each cadre and each training should be conducted by subject matter experts. The responsibility for conducting each training session can be distributed among various stakeholders, depending on the nature of the training, the target audience, and the available resources. *Trainers from within the healthcare system*, such as senior healthcare professionals, can lead some training sessions. These individuals usually have expertise in the specific subject matter and possess effective teaching and communication skills. Since they have worked in the same position, they are better equipped at conveying the crux of the training.

Subject matter experts or consultants external to the healthcare system can also be brought in to conduct specialized training sessions. This could include experts in medical fields, technology, or other relevant areas.

Academic institutions and training centers specializing in healthcare education, for example, College of Physicians and Surgeons (CPSP) and Postgraduate Medical Institute (PGMI) collaborate to provide certain types of training. This can include in-depth and formal courses for healthcare professionals.

Health departments or relevant government agencies can take the lead in organizing and delivering specific training programs, especially those related to policy changes, new regulations, or standardized practices.

Non-Governmental Organizations (NGOs) with expertise in healthcare and training can also be involved in delivering certain training modules. They often work in collaboration with governmental bodies to address specific healthcare challenges. In some cases, *international organizations, donors, or global health initiatives can support and contribute to training programs*, particularly if there is a focus on capacity building and knowledge transfer.

Associations representing healthcare professionals in various fields, for example Society of Obstetrics and Gynecologists of Pakistan (SOGP) and Association of Family Physicians Pakistan (AFPP), can contribute by organizing and conducting training sessions. They can leverage the expertise within their membership.

For electronic and interactive modules, *technology providers or e-learning specialists can contribute to developing and delivering training content.* This can include creating online courses, interactive modules, and assessment tools.

3. Training Schedule

The is carefully planned to balance the frequency of training sessions and the selection of topics. The frequency of training sessions will be determined by the complexity of the

subject matter, the availability of resources, and the needs of the participants. Priority will be given to high-impact topics, such as life-saving techniques or critical skills that are directly relevant to the participants' roles. Additionally, we will consider conducting refresher trainings on key topics to ensure that skills remain up to date.

The HRMIS linked to the LMS of DHIS2 will serve as an integrated platform for all training-related activities. When a training program is scheduled, participants will receive notifications through the system. These notifications will be generated based on predefined criteria, such as the participants' roles, training needs, and availability, which will be evident from the HRMIS.

Since the rollout of the training system will be phased, initially DHIS2 will be linked to HRMIS and indicators such as participants to be trained training date and periodicity of training together with date of refresher will be entered into DHIS2; later on LMS will be concurrently installed.

The HRMIS linked to the training database and DHIS 2 will send automated notifications via SMS to inform participants about the upcoming training. These notifications will include essential details, such as the training date, time, location, and a link to access any pre-training materials or assessments.

4. **Preventing Duplication**

To prevent duplication and fragmentation of training efforts and ensure efficient use of resources, it's essential to establish coordination mechanisms with partner organizations and stakeholders. Regular meetings or coordination channels will be established to share information on upcoming training initiatives. This will help identify potential overlaps and allow for collaboration or adjustments in training content and schedules.

Integrating Human Resources Management Information System (HRMIS) to track all training activities and participants will further aid in preventing duplication. This system will provide a centralized repository where all training records are maintained,

making it easier to track who has been trained and on what topics and when refresher training is due and other relevant details.

To further enhance the prevention of duplication and streamline training efforts, each participant will be assigned a unique identification number (ID) that corresponds with their **Computerized National Identity Card (CNIC).**

This unique ID will serve as a key component of the Human Resources Management Information System (HRMIS) which is housed by the Project Management Unit (PMU) of the Government of Sindh. These unique participant IDs will be stored within the system, enhancing its efficiency and ensuring that each participant's training history is accurately recorded and easily accessible for reference and analysis.

The use of unique participant IDs will also serve as a mechanism to prevent individuals from undergoing the same training multiple times. When registering participants for training, the system will automatically check the unique IDs against the database of past trainings. If a match is found, indicating that the individual has already completed a specific training, they will be excluded from redundant training programs. This feature not only conserves resources but also allows for the more targeted allocation of training opportunities to individuals who have yet to benefit from specific training initiatives.

5. Monitoring and Evaluation

Monitoring and evaluation are the most significant pillars of any effective training system. To ensure the impact and success of training programs, a multifaceted approach to evaluation will be adopted.

Before and after each training initiative, comprehensive assessments will be conducted. These assessments serve as a baseline and a post-training test, respectively, to gauge the knowledge and skill enhancements attained by participants during the program.

The participants' feedback is a valuable source of insight. Feedback from participants through survey for different courses will also be systematically gathered to understand

their perspectives on the training content, delivery, and overall experience. It shall cover the following:

- Content quality and ease of understanding
- User interface and ease of navigation
- Facilitator role and hands-on experience during in-person trainings
- Ease of attendance in case of in-person trainings (including reaching the training venue, getting relieved from duties during the training period, etc.)
- Gender balance and observation of gender responsiveness during in-person training sessions

Assessing the competence of trained staff, including Lady Health Workers (LHWs), Lady Health Visitors (LHVs), doctors, and sanitary inspectors, would involve a combination of methods to ensure a comprehensive evaluation. The HRMIS will play a central role in the ongoing monitoring of participants' progress. It will facilitate the real-time tracking of individual development, enabling the identification of areas in which further support, or refinement is needed. It will not only help gauge the theoretical knowledge acquired during training but also assess the practical application of skills in simulated clinical scenarios. This multifaceted approach ensures that training outcomes are comprehensive and applicable to real-world healthcare settings. Developing standardized assessment tools and criteria ensures consistency in evaluations across different regions and healthcare facilities.

Anatomical models will also be used for training and assessment, providing a controlled environment for practicing clinical skills before applying them in real-life situations.

For roles involving clinical skills, such as LHVs delivering babies, *direct observation under supervision* can be a valuable method. This would include requiring LHVs to deliver a certain number of babies under supervision to demonstrate proficiency, and using a logbook of predefined skills attained.

Clinical vignettes, or case scenarios, can be deployed in written assessments to evaluate the application of theoretical knowledge to practical situations. These tools will not only gauge the theoretical knowledge acquired during training but also assess the practical application of skills in simulated clinical scenarios including decision making and critical thinking skills. This multifaceted approach ensures that training outcomes are comprehensive and applicable to real-world healthcare settings.

Simulated scenarios, either through computer-based simulations or interactive training sessions, will be employed to replicate real life clinical scenarios . This allows for the assessment of responses to emergencies or complex situations.

OSCEs involve stations where staff members rotate and encounter different scenarios, testing a range of skills, including communication, clinical examination, and decision-making. It would include using OSCE standards at the health facility and peripheral Post-Graduate Medical Institute (PGMI).

Providing feedback to staff and encouraging self-assessment is valuable in the continuous improvement of competence. This would involve reflective practices and self-assessment tools. Training programs will be structured around competency-based frameworks, ensuring that assessments align with the specific skills and knowledge required for each role.

Implementing a system of continuous professional development encourages staff to engage in ongoing learning and skill enhancement. Regular assessments will be integrated into CPD activities to monitor and update competencies. Predefined CPD points must be obtained each year to allow access and enrollment in successive trainings.

For staff who do not pass their assessments, *a well-defined reassessment plan* should be in place. This would include additional training, targeted support, and a re-evaluation of the specific competencies that need improvement. The reassessment process should be supportive, focusing on identifying and addressing gaps rather than punitive measures.

Implementing a system that recognizes and rewards employees who consistently perform well in assessments can serve as a positive reinforcement which can be a powerful motivator. Remedial training would be provided with a no blame culture.

In addition to continuous monitoring, periodic program evaluations will be conducted at defined intervals. These evaluations provide a comprehensive view of the training system's overall impact. They consider the cumulative effects of multiple training initiatives, helping to identify trends, areas for systemic improvement, and the alignment of training programs with organizational goals.

6. **Refresher Trainings**

   Refresher training is essential to ensure that participants' skills remain updated. For critical, high-impact skills, refresher training will be held every 1-3 years. However, the exact timing will be determined by analyzing factors such as the rate of technological advancements, changes in best practices, and the feedback from participants.

   For refresher trainings, the system will be programmed to initiate notifications at appropriate intervals based on the training content and individual progress. As the time for refresher training approaches, the system will automatically generate reminders and alerts for the admins. This way the department will have systematically streamlined system for ensuring that the trainings are conducted as per schedule.

Technology to be used for Training

An comprehensive Learning Management System (LMS) is proposed which shall be integrate with the HRMIS to provide a training platform for the entire Health Department of the Government of Sindh and shall be used by all relevant programs, as well as for the routine in-service training of health staff. The same system will also be used for training health managers at a later stage.

All training programs, including their scheduling, coordination, and administration, will be centrally housed at the PMU, and managed through DHIS 2 and HRMIS initially until the LMS is set up.

This centralization will ensure a cohesive and well-coordinated approach to training and eliminate redundancy across various organizational units. The relevant units/programs under the Government of Sindh will take the lead role in curating, organizing, and executing training initiatives, in close collaboration with partner organizations and stakeholders.

This system shall provide the following features:

1. User Management
2. Training interface
3. Assessment tracking
4. Automated result / certification generation
5. Reporting and analytics
6. Cross platform accessibility (Windows, Android, iOS, MacOs, etc.)

Content to be use for Training

The existing training curricula and content are well-crafted and routinely updated. The proposed revision includes transforming each of these training manuals into e-modules that can be accessed across various devices. Additionally, interactive modules will be developed, encompassing assessment tools, and pop-up quizzes. This approach aims to enhance participant interaction through discussion boards, allowing them to be ranked and rewarded in diverse ways.

To tackle the substantial task of content development, support from partners will be sought, necessitating coordinated efforts among multiple stakeholders. Technical assistance (TA) partners and other agencies may assume responsibility for creating relevant e-content. This content would be featuring subject specialists, such as a pediatrician explaining the neonatal

resuscitation process), brief documentaries providing an overview of neonatal mortality in the province and its underlying factors, and interactive sessions featuring gamified case scenarios prompting healthcare providers to respond to different situations, such as a distressed child.

Infrastructure to be used for Training

Trainings which require physical presence at district level, but do not require a hospital as a premises to impart skills training, shall be conducted at the peripheral PGMI by the skilled trainer for each selected training. The remaining will be conducted at the hospital and health facility as required.

Defining Gender-Sensitive Approaches for Training

Developing gender-sensitive and evidence-based training approaches requires a thoughtful and intentional process, involving gender experts. The first step in the process is conduct a comprehensive gender analysis to understand the specific needs, challenges, and roles of different genders within the healthcare workforce and the communities they serve. Involving diverse stakeholders, including gender experts, healthcare professionals, community representatives, and educators, in the development process ensures multiple perspectives are considered.

Critically analyzing the existing healthcare policies and practices to identify gender biases and areas for improvement will ensure alignment with international and national gender equity frameworks. It is also essential to consider intersectionality by recognizing that gender intersects with other factors such as ethnicity, socioeconomic status, and age and thus, it is mandatory to develop training materials that address the unique experiences of individuals with intersecting identities.

In the process it is also crucial to engage professionals with expertise in educational pedagogy to design effective and engaging training methods that go beyond tick-box exercises. It would involve the use of participatory methods such as case studies, role-playing, and group discussions to actively involve participants. This helps move beyond rote learning and encourages critical thinking. Developing training scenarios based on real-life situations, ensures that the content reflects the challenges faced by healthcare professionals in their daily work, taking into account gender dynamics. Incorporating experiential learning opportunities, such as field visits, simulations, and community engagement exercises, also provides hands-on experiences that enhance understanding of gender-sensitive practices. Encouraging reflective practices where participants can critically analyze their own beliefs, biases, and *behaviors related to gender*

fosters self-awareness and promotes meaningful change. Integrating gender-sensitive content into ongoing professional development programs to reinforce learning and keep healthcare professionals updated on evolving gender-related issues.

Learning Management System (LMS)

The LMS system will be an integrated platform with linkages with the HRMIS and DHIS2. This will be central hub for all the data regarding training. The LMS shall be developed with technical support of partners, where required. The system will be linked with the existing HRMIS of the Department and shall also be linked with DHIS2. This will enable the department to assess the staff's performance in relation to the training they have received, and also as a tool to track learning for career progression. Any gaps in service delivery can be identified from the service

delivery reports coming through the DHIS2, and thus be rectified through tailored training messages.

Hybrid Model for Skill Based Trainings

Once the LMS has been developed, all training shall be done through this system. A hybrid model shall be adapted for training where clinical or other skills may be required. For such trainings, an e-log system will be available in the LMS. The e-log system will have a list of cadre-wise skills to be imparted during various training. Once the participant has completed the online component of the hybrid training, he/she will have to go for clinical attachment at the designated health facilities of their respective districts / areas and learn the required skills from the designated trainers. The trainers will then certify the participants using the instructor's module of the LMS. Once this is done, the participant will perform the skills independently for a defined number of times (as per the training manuals), and this will be recorded in the e-logbook of the relevant trainee.

The key features of Learning Management System (LMS) will be:

1. **Training Course Management**

   It will include a system to upload courses that are articulated through an asynchronous learning process. The format of the course will be multi-dimensional including theory, videos, quizzes, assignments, reading material, video transcripts etc, for the users to enhance their skills and learning. The system will also have the functionality to upload quizzes for various courses and take pre/post-tests from the users, to assess the learning curve. The front end of the system will include the details of courses, their duration, training topics, methodology etc.

   The modules will be designed to ask descriptive questions from the participants and seek their response and comments regarding a specific topic thereby maintaining interest and assessing their learning curve. This feature will also guide the trainer/administrators to

track the progress of the training of various cadres and enable them to assess the performances.

The system should report all the analytics related to who took the course, what was the learning curve, login and course taking duration of the participants. The analysis must also comprise the attendance of the participants, when they log in, when they log out, when and where they leave the course.

After successful completion of the training course, a certificate will be automatically issued to participants who fulfil certain criteria. The criteria for issuing the certificates are course completion, with a certain threshold. The development team will identify these in inception meeting with the project team.

The layout and theme of the LMS will be very interactive and engaging. Participants must be able to easily navigate through and take the course.

2. **User Management**

There will be three level of users;

a. **Administrators**, who will have access to all the features (uploading, deleting, analytic reports, management of the session etc.). Roles & Responsibility are to be defined.
b. **Trainers**, who will develop and deliver the content through the LMS
c. **Trainees**, the primary health care cadre who will be provided username and passwords as given access after their notification for a particular training. Roles & Responsibility are to be defined.

3. **Analytics & Reporting**

The key features of the internal analytic reports will include

a. Detailed profile of the trainees
b. Name
c. Date of birth
d. Gender (and disaggregation in summary reports as to how many particiants trained against each gender)

e. Address (City, District, Tehsil, Contact number)
f. Educational background
g. Attached to Health Facility
h. Attendance of the trainees (when they login, when they log out when and where they leave the course)
i. Learning curve of the trainees
j. Dropout rate
k. If training is through any partner Organization than
    - Detailed profile of the training partners - Name, Address, category of training program they conduct

The system will have a feature of auto-generation of reports (daily, weekly, or monthly), and a dashboard for the various user levels including management for review. The comprehensive analysis and reporting will include

a. insights on the performance of the learners and ultimately the effectiveness of courses on offer
b. support background monitoring for specific user levels
c. gauging the learning trends of users and tracking compliance of the learners.

The reports can be categorized (but not limited to):

- Course Reports
- Scheduled (upcoming courses)
- Enrolment, Assessment
- User Reports
- Active Users
- Login activities
- User's progress
- Performance Comparisons using various parameters
- Organization Training
- Complete course report by unit/theme/location or gender, Certification, Curriculum, policy etc.
- Custom Reports
- Tailored to meet specific requirements/requests such as,
    - quick and easy access to quiz' analysis

- Learner tracking
- to check the amount of time spent on a particular lesson or the number of attempts made to pass a quiz
- challenges faced during the courses

Annex A: Cadre Wise Training

	Cadre Wise Trainings Sindh			
Cadre	**Core Competencies**	**Skills/ Knowledge Area**	**Training Module**	**Training Days**
LHW (Lady Health Workers)	Lady Health Workers should possess competencies in community health assessment, health education, and promotion. They need to be skilled in providing basic first aid, maternal and child health care, and have excellent communication and interpersonal skills to effectively engage with the communities they serve.	Counselling Skills ANC (basic) Delivery (danger sign) Post Natal Care (PNC) (basic)- Family planning Nutrition	Refresher Module (CHW/LHW) Available as PDF	10 days
		BLS	Using the tool developed by CPSP	
LHV (Lady health visitors)	Lady Health Visitors should build on the foundation of LHW competencies and further develop skills in advanced maternal and child health care, family planning counseling, disease prevention, and control. They are also responsible for raising public health awareness, community mobilization, and demonstrating strong leadership in their interactions with community members.	ANC Delivery Basic/NS EmOnc PNC ENC (essential newborn care) Family planning IMNCI Referrals Nutrition	Refresher Manual	10 days
		BLS	Using the tool developed by CPSP	
All Doctors (MO/WMO)	Doctors, including Medical Officers and Women Medical Officers, should excel in clinical diagnosis and treatment, emergency medical care, disease management, and prevention. They need to understand epidemiology and public health principles while managing health systems effectively.	PHC system Role of BHU/RHC Role of outreach workers EmONC Neonatal Resuscitation Role of HF based Workers	MO induction manual (2012) Not available as PDF	
		BLS	Using the tool developed by CPSP	
LHS (lady health supervisors)	Lady Health Supervisors play a crucial role in	Supportive supervision		

	program management and coordination. They must be adept at team leadership and supervision, data collection and reporting, quality assurance, and monitoring. Additionally, they should possess strong interpersonal and communication skills to facilitate effective teamwork.	Counselling Skills		
		ANC (basic)		
		Delivery (danger sign)		
		PNC (basic)- HBNC		
		Family planning		
		Nutrition		
		BLS	Using the tool developed by CPSP	
CDC Supervisors	CDC Supervisors should have expertise in disease surveillance and control, outbreak response and management, data analysis and reporting, regulatory compliance, and effective communication with health authorities to ensure timely and appropriate responses to public health threats.			
Sanitary Inspector	Sanitary Inspectors need to be knowledgeable in environmental health and sanitation, food safety and inspection, vector control, public health regulations, and enforcement of sanitary standards. Their competencies are essential for maintaining a healthy and safe environment			
Midwife	Midwives should possess competencies in antenatal and postnatal care, labor and delivery assistance, neonatal care, family planning services, and infection control through aseptic techniques. These skills are vital for ensuring safe pregnancies and childbirth.	ANC	Refresher Manual	10 days
		Delivery Basic EmOnc		
		PNC		
		ENC		
		Family planning		
		IMNCI		
		Referrals		
		Nutrition		
		BLS	Using the tool developed by CPSP	
Nutrition Assistant	Nutrition Assistants should be well-versed in nutritional assessment and counseling, dietary	Counselling Skills	Refresher Manual	10 days
		ANC (basic)		
		Delivery (danger sign)		

	planning, malnutrition screening, and health education related to nutrition. They also play a crucial role in monitoring and reporting on nutritional outcomes.	Post Natal Care (PNC) (basic)-		
		Family planning		
		Nutrition		
		BLS	Using the tool developed by CPSP	
Medical Assistant	Medical Assistants should be proficient in emergency medical response, patient assessment and stabilization, trauma care, basic life support including CPR, and the administration of medications and operation of medical equipment to provide critical pre-hospital care.	Sensitization on health services		
		General Etiquette		
		Essential Newborn Care (ENC)/ Helping Babies Breathe (HBB)		
		Integrated Management of Neonatal and Childhood Illness (IMNCI)		
		Family Planning		
		Basic Life Support (BLS)	Using the tool developed by CPSP	
Computer operator	Competencies for computer operators include data entry and management, expertise in computer software and database use, troubleshooting of information technology issues, efficient record-keeping, and report generation. Data security and confidentiality are also essential skills in their role.			
Storekeeper	Storekeepers need to be skilled in inventory management and control, understanding procurement and supply chain processes, maintaining accurate records of stock, implementing quality control and assurance measures, and ensuring the security of stored items.			