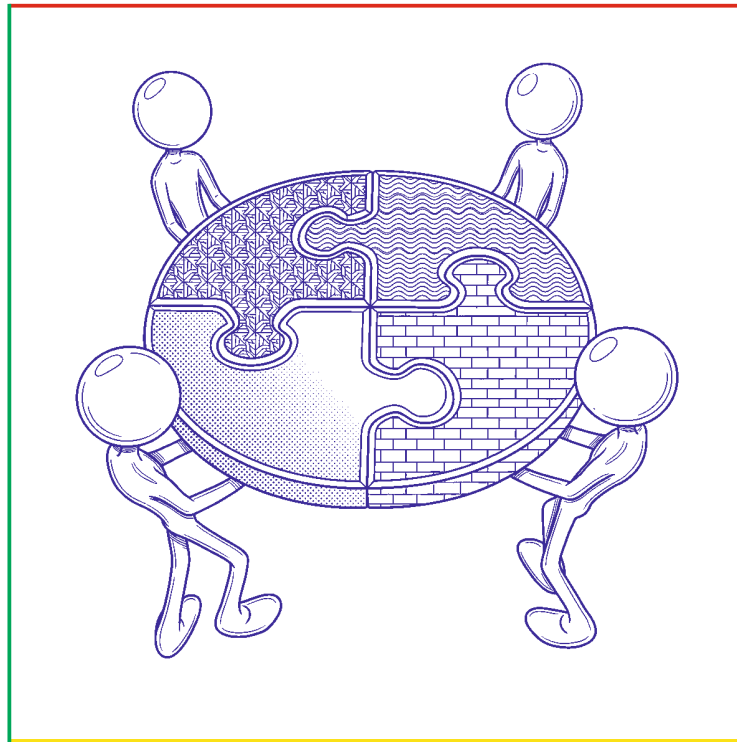


Report on Capacity Building of Health Functionaries



**Health and Family Welfare Department
Government of Kerala**

KERALA.HEALTH

TRAINING DIVISION

NHM-KERALA



**GOVERNMENT OF KERALA
HEALTH & FAMILY WELFARE DEPARTMENT**

Foreword

Strong health systems depend not only on infrastructure and technology but also on a competent, motivated, and continuously evolving workforce. The NHM capacity building unit has played a pivotal role in strengthening the capacities of health personnel across the State through systematic training, leadership development, and institutional support for public health programmes.

This document provides a comprehensive overview of the mandate, institutional evolution, training systems, digital learning initiatives, and contributions to health system strengthening in Kerala. It highlights the efforts in advancing workforce competencies, promoting evidence-based practices, and supporting the effective implementation of health programmes across different levels of care.

As Kerala moves towards a more integrated, technology-enabled, and people-centred health services, NHM will continue to play a critical role in preparing the workforce for emerging challenges and opportunities. The experiences and achievements documented herein will serve as a valuable reference for policymakers, administrators, and health professionals engaged in health sector development.

In 2019, along with the Aardram initiative, detailed discussions were conducted with Dr Divya and team. The team later prepared the training modules, established a panel of experts, and developed a training calendar involving all the segments of Health Department for capacity building. The specific courses as induction courses and refreshers courses were designed. Around mid-2019, online meeting platform got introduced and made available by zoom platform. Subsequently, the idea was mooted for developing an online training modules for imparting training. During the discussion there was apprehension from some quarters regarding the online training. However, Child health specialist Dr Sreehari and NCD state nodal officer Dr Bipin expressed that they would go for online courses. So, the first batch from MLSP and the doctors for NCD were selected and trainings were conducted. Later the learning management system got well established and that was the strategic advantage to Kerala health because from the day one of COVID pandemic, the concurrent training could be given to all the functionaries not only from health departments but all the line departments.

I congratulate the successive SMDs of NHM Dr Rathan Kelkar, Mr Jeevan Babu, Dr Vinay and Mr Rahul for their dedicated efforts. Dr Divya and subsequently Dr Amba has taken huge efforts to build the capacity building program for the health functionaries and collated information for this document.

I wish all the success for NHM team's future endeavours in capacity building.

Rajan N Khobragade IAS
Additional Chief Secretary (Health),
Government of Kerala

Message

A well-trained and competent health workforce is the foundation of effective health service delivery. NHM has been instrumental in supporting the State's health system through capacity-building programmes, technical training, leadership development, and continuous professional education for healthcare providers and programme managers across Kerala.

Over the years, the NHM has successfully adopted innovative approaches to learning, including digital platforms, blended training methodologies, skills laboratories, and competency-based education models. These initiatives have enhanced the quality, reach, and effectiveness of training programmes, contributing to improved service delivery and stronger public health programme implementation.

This document presents the institutional framework, key activities, innovations, achievements, and contributions of capacity building division of NHM to Kerala's health sector. It reflects the commitment to excellence in training and its important role in strengthening the knowledge and skills of the health workforce.

I extend my appreciation to the leadership, faculty, officers, and staff of the capacity building division for their sustained commitment to capacity building and health systems strengthening. I also congratulate the team that has developed this publication for systematically documenting the journey, achievements, and best practices, creating a valuable resource for future learning and policy development.

Rahul Krishna Sharma IAS
State Mission Director
National Health Mission, Kerala

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The State Training Division:

Architecting a Future-Ready Health Workforce

1. An Overview

The **State Training Division** of the National Health Mission (NHM) Kerala stands as the strategic nerve center for human resource development within the Health Services Department. Operating in a state renowned for its "Kerala Model" of development, the Division does not merely manage logistics; it architecturally transforms a multidisciplinary workforce to meet the sophisticated demands of Kerala's unique demographic and epidemiological landscape. The Division's mandate is deeply rooted in the specific challenges of the Kerala context:

- **The Epidemiological Shift:** As the state faces a dual burden of rising Non-Communicable Diseases (NCDs) and the re-emergence of infectious threats, the Division institutionalizes continuous, evidence-based training to ensure the workforce remains adaptable.
- **Resilience in Crisis:** Having navigated multiple floods and the COVID-19 pandemic, the Division has pioneered "surge training" and emergency preparedness, embedding these skills into the routine public health framework.

1.1 Background

The State Training Division under the National Health Mission (NHM), functioning in close coordination with the Directorate of Health Services (DHS), Kerala State Institute of Health & Family Welfare (KSIHFW), and State Health Systems Resource Centre (SHSRC), served as the nodal institutional mechanism for planning, implementing, monitoring, and institutionalizing training and capacity building across all cadres of the public health.

1.2 Vision and Mission

Vision

To foster a skilled, adaptable, and responsive public health workforce capable of ensuring equitable, high-quality healthcare services across Kerala, both in everyday settings and in times of public health emergencies.

Mission

To establish a sustainable framework for continuous, research-driven workforce development through organized administrative systems, digitally enabled learning solutions, practical and simulation-oriented training strategies, and strong systems for tracking and assessing outcomes

2. Training Governance Framework in Health Services

The state of Kerala has achieved better health indicators as compared to other states of India. Many of its health indicators surpass those of other Indian states; some are even at par with developed countries. The Healthcare system in Kerala was recognised as a model system internationally. Considering the emerging and re-emerging communicable diseases, the influx of migrant population, increase in the older population and environmental degradation, the existing healthcare delivery system needs to be more equipped enough to address the changing health needs of the population effectively and

Comprehensively. In order to Empower the health system to address the new challenges, a robust training and capacity-building mechanism started for the health system since 2013. Employees are the backbone of the health system; Empowering and updating their knowledge and skill is Unavoidable for the health system and the health and well-being of our people in the State. Inorder to achieve the above goal, National Health Mission,

Thiruvananthapuram has constituted a State Level and District Level advisory groups for training and capacity building in health services .Government have Constituted the following State Level

and District Level advisory group for training and capacity building in health services as per G.O.(Rt)No.2332/2022/H&FWD.

Roles and responsibilities were clearly delineated across the system. The Additional chief secretary , Health and family welfare provided policy direction and overall oversight. The Additional Director of Health Services (Administration and Training) coordinated training activities across programmes and districts. The State Mission Director (NHM) ensured programmatic integration and financial oversight. KSIHFW and SHSRC provided academic, technical, and monitoring support. District Medical Officers ensured district-level execution, while the Knowledge Management Team managed content development, LMS operations, live training platforms, and digital dissemination.

2.1 . Constitution of State and District Advisory Group for Training in Health Service.

A State-Level Advisory Committee on Training and Capacity Building was constituted under the chairpersonship of the Principal Secretary (Health & Family Welfare), with representation from NHM, DHS, academic institutions, professional councils, SHSRC, and KSIHFW. The committee coordinates learning, curriculum quality, certification norms, and future-oriented training needs. Correspondingly, District-Level Advisory Committees under DMO and DPM were constituted to assess district-specific training needs, monitor implementation.

The capacity building ecosystem was supported through strong partnerships involving NHM, DHS, Directorate of Medical Education (DME), KSIHFW, SHSRC, C-DIT for digital platforms, KILA for community and local self-government institution training, professional councils such as KSMC and KNMC, and public–private partnerships for ICU and speciality training.

3. Annual Trainings in various programmes

The State Training Division prepares and implements a comprehensive annual training calendar under the National Health Mission (NHM), incorporating all approved training activities across various programme components such as RCH, NDCP, NCD, and other priority health initiatives. The training calendar is developed based on Financial Monitoring Report (FMR) codes and approved Programme Implementation Plans (PIPs), ensuring systematic scheduling and uniform rollout of capacity-building activities at state, district, and block levels. It serves as a guiding framework for planning, coordination, and monitoring of all trainings, detailing the type of training, target participants, batch size, duration, and allocated budget. All the trainings listed

below are conducted in accordance with this structured training calendar, enabling timely implementation, optimal resource utilization, and standardized capacity building of healthcare personnel across the state

Specialized training modules were developed and delivered on ICU care, ventilator management, oxygen therapy, sedation, weaning, and pediatric critical care. The EMCares emergency medicine training module was integrated as a standardized program to enhance emergency readiness in secondary and tertiary care institutions.

Periodic administrative training programs were institutionalized for state and district officers and heads of institutions, covering managerial, legal, and governance competencies. Mandatory induction training and specialty refresher programs were introduced for junior consultants and allied health professionals, with mentorship by senior specialists.

Training Evaluation, Certification and HR Integration--

A standardized system for training evaluation, feedback collection, certification, and trainer appraisal was implemented. Line lists of trained personnel are maintained at district and institutional levels, and training completion data are integrated with the SPARK HR platform to support workforce planning and career progression.

Trainings	Explanation
Comprehensive Abortion Care	1. Medical Management of Abortion trainings 2. Manual Vacuum Aspiration/Medical Management of Abortion trainings for Gynecologists
First Referral Units	1. Trainings on Prevention of Preventable Maternal Deaths
LaQshya (Labour Room Quality Improvement Initiative)	LaQshya trainings for hospital staffs of institutions selected for LaQshya accreditation as per requirement

Health Other Maternal Components	1. District level trainings on Reproductive Tract Infections / Sexually Transmitted Infections for Medical Officer, Auxiliary Nurse Midwife & atory echnicians Labor
Swasthya Rashtriya Bal Karyakram (RBSK)	1. Rashtriya Bal Swasthya Karyakram Refresher trainings 2. Orientation training for Medical Officers / other staffs at Delivery points 3. Half-day .Rashtriya Bal Swasthya Karyakram Refresher trainings 4. .Rashtriya Bal Swasthya Karyakram Refresher trainings for all (186) Health blocks / Institution-level traings organised at block CHC 5. refresher training for Comprehensive Newborn screening services
Community Based Care - Home Based Newborn Care(HBNC), Home Based Young Child Care (HBYC)	1. District Level TOT trainings for selected 10 participants
Facility Based New born Care	1. NSSK(Navjaat Shishu Suraksha Karyakram) Training for Medical Officers 2. NSSK Training for Staff Nurses 3. Trainings for Family participatory care (KMC) per district to get a team of trained doctors and Nurses at SNCUs. 4. Musqan District level Trainings
Child Death Review	Child Death Review trainings per district.

SAANS(Social Awareness and Action to Neutralize Pneumonia Successfully)	1. District level trainings for Medical Officers, Staff nurses, JPHNs, PHNs etc, 2. Training for Paediatricians and medical Officers on new Pneumonia management guidelines 3. Training of ASHAs in National Childhood Pneumonia Management Guidelines under SAANS
Paediatric Care	District level ToT training on F-IMNCI.(Facility-Based Integrated Management of Neonatal and Childhood Illness)
Immunization including Mission Indradhanush	1. Cold Chain Handlers Training 2. Immunization Training for ANMs 3. Orientation training for Medical Officers and District level officers 4. Block level training on UWIN portal for ASHAs Surveillance, Research, Review & Evaluation (SRRE) 5. District level training on QMS (Quality
	Management System) in AEFI (Adverse Events Following Immunization for PHC Medical Officers, PHNs, ANM, supervisors, etc.
Adolescent Friendly Health Clinics	1. Training for Medical Officers 2. Training for ANM/LHV/MPW/other healthworkers
Weekly Iron Folic Supplement (WIFS)	WIFS block level trainings

Peer Educator Programme	Block Level trainings of New Peer Educators
School Health And Wellness Program under Ayushman Bharat	. District level DRG Trainings
Other Adolescent Health Components	Coordination and dissemination workshop for RKSK and AB_SHWP
Female Sterilization	Training on Laproscopic sterilization
Male Sterilization	Training for Medical Officers on NSV (No-Scalpel Vasectomy)
Intrauterine Contraceptive Device Insertion (Postpartum Intrauterine Contraceptive Device & Post-Abortion Intrauterine Contraceptive Device)	Intrauterine Contraceptive Device Insertion training for medical officers
Family Planning Logistics	Trainings on Family Planning Logistics Management
Management Information System (FPLMIS)	Information System

Anaemia Mukt Bharat	1. Orientation activities on vitamin A supplementation and Anaemia Mukta Bharat Programme/ VIVA Kerala 2. One day Orientation of frontline workers (ASHA/ANM) and allied department workers (Teachers/AWW) on VIVA Kerala/ Anaemia Mukta Bharat
National Deworming Day	· Training of Nodal teacher, field staff and Anganwadi workers on NDD (National Deworming Day)
Implementation of IDSP	1. One day sensitization for PRIs(Panchayati Raj Institutions) 2. Training for Medical Officers 3. Training of Hospital Pharmacists/Nurses 4. IHIP (Integrated Health Information Platform) Training for Lab Technicians Including Private Hospitals. 5. ASHA & MPWs, AWW & Community volunteers Trainings Block level training for health team including HS/HI, JHI/JPHN,MLSP 6. One day IHIP training for private Hospital medical officers/ESI hospitals & Medical College
Malaria	· Training of staff including field staff, Field supervisors, LTs and ASHAs

	2. Refreshment training for health staff and newly recruited MOs on malaria surveillance, detection, treatment and preventive measures-
AES/JE	1. Training for health supervisory staff and Major hospital Physicians, Pediatricians regarding surveillance, control and eco-epidemiological investigation of the case.
Dengue & Chikungunya	District level training of doctors,field supervisors,field staff and ASHAs on dengue surveillance,management and prevention
Lymphatic Filariasis	Lymphatic Filariasis trainings
Other NLEP Components	Orientation training-Training in connection with LCDC Trainings for field level staff in connection with LCDC, District level Refresher Training of General health staff, including School health Nurse and Urban JPHNs, Training to DLO/ALO/NMS at CLTRI.
Drug Sensitive TB (DSTB)	1. Trainings for officers / staff/ TB Champions and all district staff at National level, State level and District level 2. CME Training in Medical Colleges, 3. Community Engagement Activities - Sensitization of TB survivors, sensitization of NGOs, PRIs meeting,

	TB survivor led activities, etc
Drug Resistant TB(DRTB)	Training for AIC
Implementation of NRCP	Training for Medical Officers, Staff Nurse, ASHA ANM & other Health care workers.
Implementation of PPCL	Training of Medical Officers and field staff for Early Diagnosis, Initiation of therapy, referral and Critical care
Implementation of District Mental Health Plan	Capacity Building incl Training
Geriatric Care at DH	Capacity Building incl Training
Implementation of COTPA - 2003	1. Training of stake holder organizations like, police department, excise department, food safety department, education department etc 2. Training of health professionals Includes, doctors, staff nurse, MPWs, ASHAS etc.
Tobacco Cessation	1. Training of Health care workers – medical officers , staff Nurses , MPW ,counselors on Tobacco cessation
Other NPCDCS (National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke) Components	. District Level Trainings and PBS Trainings

Peritoneal Dialysis Services	Capacity Building including Training
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Implementation of NPCCHH(National Programme for Climate Change and Human Health)	. District Level Trainings
Implementation of NPPC (National Programme for Palliative Care)	District level Trainings
Screening of Deafness	1. Training for CDPO, Anganvadi supervisors, PHN and MPWs supervisors. 2. Trainings for anganwadi workers
Support for Burn Units	District level capacity building including Training
Support for Emergency Trauma Care	District level capacity building including Training
MAS	Training of 252 MAS
Development and operations of Health & Wellness Centers - Rural	1. Refresher training of MLSPs
	2. SHC-HWC team building training.

ASHA (including ASHA Certification and ASHA benefit package)	1. Induction training to ASHA 2. ASHA 10th Module training 3. Supplementary training to ASHA
Quality Assurance Implementation & Mera Aspataal	1. NQAS district level training of prioritized/targeted institutions for NQAS in the district.
	2. Kayakalp refresher training 3. District Level refresher trainings/ Internal Assessor workshop under Kayakalp. 4. Facility Level Kayakalp Training on "Swachh Bharat Abhiyan
Swacch Swasth Sarvatra	1. Capacity Building Swacch Swasth Sarvatra(SSS) training related to water sanitation and Hygiene (WASH) Training for infection control, Sanitation and Hygiene, Waste Management System.
Planning and Management Program	1. Training cum review meeting for each district for Monitoring & Evaluation 2. PMU Trainings, DAP, Audit fees, mobility support, other overhead expenses 3. District level review meeting on national programmes based on key deliverables 4. District review mission on alternate months

Health Management Information System(HMIS)	1. Training cum review meeting one per quarter for HMIS & MCTS / RCH portal / ANMOL if launched 2. Training cum review meeting per month for HMIS & MCTS / RCH portal /ANMOL if launched
Snake bite	District level trainings

4 Annual Training Monitoring Sheet

Apart from maintaining the annual training calendar, the State Training Division also keeps a comprehensive training monitoring sheet to systematically capture, review, and track upcoming training programmes across various programme divisions. This monitoring mechanism enables timely identification of planned activities for the forthcoming months, ensuring better coordination and alignment among divisions. It also helps avoid duplication of efforts, optimizes resource utilization, and supports informed decision-making at the state level. Furthermore, the monitoring sheet serves as a dynamic tool for regularly updating training schedules, assessing progress, and ensuring that all proposed capacity-building initiatives are implemented in a timely and efficient manner.

6. Learning Management System (LMS)

In collaboration with C-DIT, the State Training Division of NHM has developed and operationalized a Learning Management System (LMS) hosted on the Moodle platform. The LMS supports course registration, assessment, certification, skill-gap analysis, and monitoring. Structured courses for MLSP, NQAS, Infection Control, Critical Care, RMNCHA+N, and NCD programs were progressively onboarded in LMS.

(<https://keralahealthtraining.kerala.gov.in>)

A dedicated LMS Management Team was constituted under the leadership of the Additional Director (A&T), State Mission Director (NHM), and State Nodal Officer (Training). Detailed

SOPs governing LMS operations were notified, covering user roles, course creation of workflows, content vetting, access control, online training etiquette, certification, system maintenance, and data privacy.

A Virtual Knowledge Management and Content Creation Team were established to support rapid development, vetting, and dissemination of training materials. A standardized workflow for content creation, from training mapping and session blueprinting to expert vetting and LMS upload, was institutionalized. During the COVID-19 period, this system enabled the creation of a large volume of guidelines, SOPs, toolkits, presentations, IEC materials, and multimedia resources across cadres and sectors.

An exclusive document on LMS portal at Kerala Health system is attached as annexure.

6. Operationalization of Online Training through SASAHKT portal.

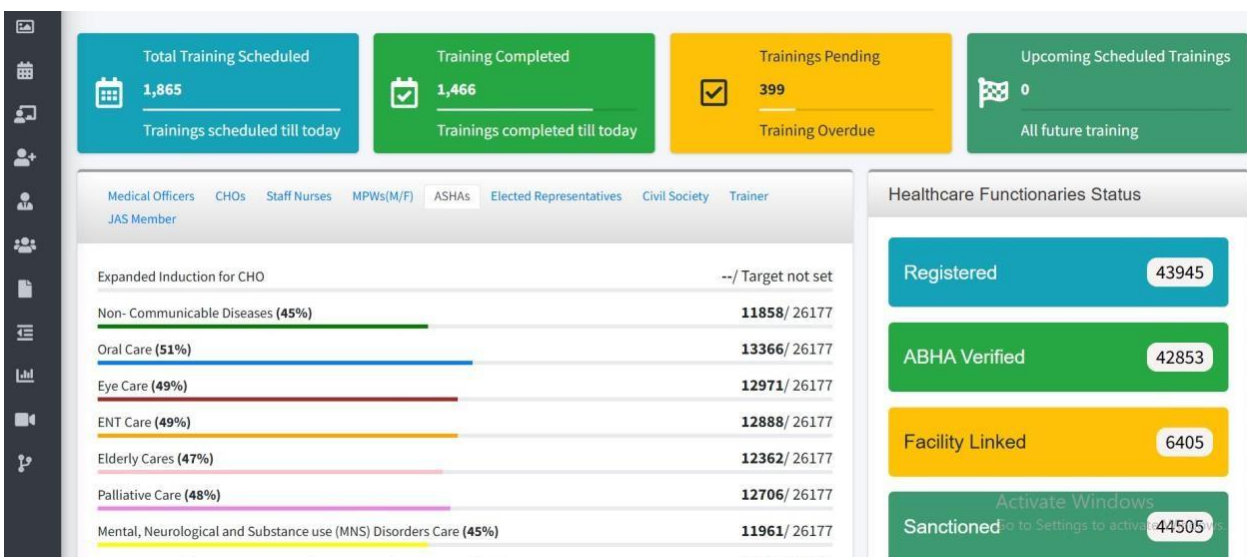


The SASAHKT portal serves as a comprehensive digital platform for streamlining training planning, coordination, and implementation within the health system. It enables systematic management of training activities by facilitating the creation, scheduling, and tracking of training programmes across various programme divisions. Through the portal, detailed information on training plans, participant nominations, resource persons, and training materials can be efficiently managed in a centralized manner. This enhances transparency, improves coordination between state and district levels, and ensures timely communication of training-related activities.

The importance of the SASAHKT portal lies in its ability to support evidence-based planning and effective implementation of capacity-building initiatives. It helps avoid duplication of trainings, ensures optimal utilization of resources, and allows monitoring of training progress and coverage.

Additionally, the platform provides valuable data for analysis, enabling programme managers to identify gaps, assess training needs, and make informed decisions for future planning. Overall, SASHAKT plays a crucial role in strengthening the efficiency, accountability, and impact of training systems within the public health framework.

At present, a total of 43,933 participants are registered on the SASHAKT portal, reflecting its wide reach and active engagement in supporting training planning and implementation across the health system.



7. Kerala Health Online Training YouTube channel

With 32.10K subscribers, a 3.6% impressions click-through rate, 9.8 million impressions, and 2.3 million views



Content: Training modules for healthcare staff and public awareness videos.

Key Achievements (as of July 2025):

- Videos: 835 total (6 in July 2025)
- Subscribers: 32.10k
- Views: 2.17M lifetime; 43,947 in July
- Watch Time: 212,100 hrs
- lifetime; 4,400 hrs in July
- Impressions: 8.7M lifetime; 194,800 in July
- CTR: 3.5% lifetime; 4.8% in July (above average)

Summary :Kerala Health Online Training YouTube channel hosts 835 videos, reaching 2.17M views, 30K+ subscribers, and 212K+ watch hours. Strong CTR (4.8% in July 2025) highlights its role as a key public health education platform.

- Channel Link: <https://www.youtube.com/@KeralaHealthOnlineTraining>

YouTube Channel – Kerala Health Online Training: Hosts 835 videos, with 2.17M views, 30K+ subscribers, and 212K+ watch hours. July 2025 alone saw 44K views and a CTR of 4.8% (above average).

To enhance the skills of healthcare professionals through standardized, accessible, and high-quality e-learning, ensuring updated practices and improved service delivery. The YouTube

channel **Kerala Health Online Training** serves as a digital learning platform aimed at enhancing the knowledge and skills of healthcare professionals through standardized, accessible, and high-quality e-learning resources. The channel supports continuous capacity building by providing training content that promotes updated clinical and public health practices, thereby contributing to improved service delivery across the health system.

With a growing reach of **32.10K subscribers**, the channel has established itself as an effective medium for disseminating training and knowledge. It has generated **9.8 million impressions** with an **impressions click-through rate of 3.6%**, reflecting strong audience engagement and visibility. The channel has also achieved **2.3 million views**, demonstrating substantial utilization of its training content by healthcare professionals and other learners. These metrics highlight the channel's expanding role in supporting digital learning and strengthening human resource capacity in the health sector.

8. SKILL LAB TRAININGS

Reduction of Maternal Mortality Ratio (MMR), Infant Mortality Rate (IMR), and Neonatal Mortality Rate (NMR) remains a key priority under Sustainable Development Goal (SDG) 3. Strengthening the capacity of healthcare workers through competency-based training is essential for improving service delivery outcomes.

However, gaps such as inadequate practical exposure, limited competency assessment, insufficient post-training mentoring, and underutilization of trained personnel have affected the effectiveness of conventional training systems. To address these challenges, Maternal Health Skill Training Centres (Skill Labs) are established to ensure hands-on, simulation-based learning and continuous skill reinforcement.

Skill Lab Training Centres play a critical role in strengthening the capacity of healthcare providers through hands-on, competency-based training. Effective implementation of these guidelines will contribute significantly to improving maternal and neonatal health outcomes by ensuring a skilled and responsive health workforce.

Skill Lab Training Centres are dedicated facilities equipped with skill stations where trainees acquire practical competencies through simulation exercises, mannequin-based practice, demonstrations, and supervised clinical exposure.

Training Methodology

The training approach is competency-based and includes a mix of theory and practical sessions .Use of mannequins, simulation models, videos, case scenarios, and demonstrations

Training Areas (Indicative) are Antenatal Care and Labour Management, Infection Prevention and Control (IPC), Normal Delivery and Emergency Obstetric Care, Newborn Care and Resuscitation, Management of Complications (PPH, Eclampsia, Shock), Postpartum Care and Family Planning, Labour Room Organization and Biomedical Waste Management

9. Recent ongoing activities- [2025-2026]

The Pandemic Preparedness Plan - Training and the Field Epidemiologist Training Programme (FETP) are critical pillars of Kerala's strategy to build a future-ready health workforce capable of managing both routine and emergency public health challenges.

9.1 Pandemic Preparedness Plan - Training

Kerala's history with multiple floods and the COVID-19 pandemic highlighted the necessity for "surge training" and rapid response mechanisms. A structured plan is required to avoid the fragmentation of training activities .Pandemic preparedness plan embeds emergency preparedness into the routine public health framework. It ensures that healthcare workers are not just reacting to a crisis but are pre-equipped with evidence-based skills to navigate infectious threats and other public health emergencies effectively. Two workshops with participants from South and North zone was conducted on February 2026 to introduce the concept and PPP preparation at LSGD level .

Involvement in Pandemic Preparedness

The State Training Division organised two training sessions for District teams across Kerala—one covering the southern districts and the other the northern districts—under the theme “Learning Site: Pandemic Preparedness Plan Preparation.” The objective of the training was to impart practical knowledge on the development of pandemic preparedness plans, enabling district teams to independently undertake similar planning processes.

The forenoon session included a detailed presentation on the step-by-step process adopted for plan preparation. Additionally, an online module was developed for integration into the LMS portal to support continued learning.

The afternoon session was designed to be participatory, where teams presented their respective plans and engaged in discussions to identify gaps at the Panchayat, Block, institutional, and district levels. This interactive approach facilitated peer learning and helped strengthen preparedness planning across all tiers.

9.2. Field Epidemiologist Training Programme (FETP)

As the state faces a dual burden of rising Non-Communicable Diseases (NCDs) and the re-emergence of infectious threats (like Amoebic Encephalitis), there is a critical need for specialized personnel who can perform eco-epidemiological investigations and surveillance. The FETP by ICMR NIE Chennai for Kerala state coordinates specialized training for Block Epidemiologists across the state. It focuses on strengthening field-level data collection, outbreak investigation, and rapid training deployment, which are essential for the "Kerala Model" of maintaining high health indicators through proactive intervention.

9.3. Quality NQAS Trainings through Zoom

Sl. No.	NQAS Training for JAK	Training Date	No of Participants
1	Area of concern A	12.08.2025	2490
2	NQAS Training for JAK	05.08.2025	2037
3	Steps for Implementation of NQAS at AAM	12.09.2025	921
4	Area of concern H	09.09.2025	1358

5	Area of concern F	02.09.2025	839
6	Area of concern F	29.08.2025	839
7	Area of concern E8 to 17	26.08.2025	1552
8	Area of concern E1 to 7	22.08.2025	2232
9	Area of concern C & D	19.08.2025	2391
10	Area of concern B	16.08.2025	2109
11	Steps for Implementation of NQAS at AAM	19.09.2025	1006
12	Kayakalp	22.01.2026	187

9.4. Internships through Training Division

The internship in the National Health Mission was facilitated through the Training Division, which served as the central coordinating unit for all related processes. The division stays responsible for handling and processing all official files pertaining to the internship, including reviewing applications, maintaining documentation, and ensuring proper administrative procedures were followed. It also played a key role in issuing the necessary permission orders and official communications, thereby enabling the smooth initiation and execution of the internship programme. Additionally, the Training Division ensured coordination between different departments and stakeholders, supporting effective implementation and monitoring of the internship activities

10. Infrastructure of Regional Training Centres

The State Training Division has initiated the development and strengthening of training infrastructure across various districts to support capacity-building activities. In Alappuzha, construction of a new District Training Centre has been proposed, with land already identified and a fund allocation of ₹2,86,45,000; however, the work has not yet commenced. In Kozhikode,

construction of a new NHM Training Centre, sanctioned during 2020–21, is proposed with land identified, and an additional vertical extension of the existing training centre has also been planned with a fund allocation of ₹1,90,00,000, though work is yet to begin. In Wayanad, construction of a new Urban Training Centre is in progress, with land identified, a total allocation of ₹1,79,00,000, and an expenditure of ₹88,500 reported so far.

In Malappuram, a new NHM Training Centre cum skill lab has been proposed with a fund allocation of ₹3,33,00,000; however, land has not yet been identified, and the work has not commenced. In Kannur, construction of a new training centre is planned with land identified and a fund allocation of ₹1,97,00,000, but the project is yet to start. In Kottayam, development of a Regional Training Institute, sanctioned during 2018–19 with an allocation of ₹30,00,000, is pending implementation despite land availability. Similarly, in Palakkad, renovation and vertical extension of the Training Institute at Puthussery, sanctioned during 2018–19 with ₹60,00,000, has not yet been initiated. In Thrissur, vertical extension of the Training Institute at Koratty, sanctioned during 2020–21 with a fund allocation of ₹2,50,00,000, is completed.

Overall, while land has been identified in most districts and financial approvals have been secured, the progress of infrastructure development remains limited, highlighting the need for expedited implementation and close monitoring.

District	Training Centre Proposed
Alappuzha	Construction of new building District Training Centre, GH compound Alappuzha. AS awaiting
Kozhikode	Construction of New Building for NHM Training Center (Rs 98,65,000 during 2020-21)
	Vertical Extension of Training Centre
Wayanad	Construction of new building for Urban Training Centre. Work in progress.

Malappuram	Construction of new building for NHM Training Center cum skill lab. Site not confirmed
Kannur	New building for training centre
Kottayam	Development of Regional Training Institute Sanctioned during 2018-19 .Rs 30 Lakhs
Palakkad	Training Institute Puthuserry-Renovation & Vertical Extention sanctioned during 2018-19 Rs 60Lakhs
Thrissur	Vertical Extension of Training Institute for Accomodation of Trainees-Training centre at Koratty. Sanctioned during 2020-21, Rs 250 Lakhs

11. Challenges

Despite the significant advancements made in institutionalizing training systems and digital platforms, the State Training Division continues to encounter several operational and systemic challenges. One of the major concerns is the fragmentation of training activities across multiple programme divisions, which often leads to duplication, overlap, and suboptimal convergence. Although digital platforms such as the LMS & SASHAKT portal have been introduced, there remain limitations in real-time monitoring, data integration, and comprehensive tracking of training outcomes. Variations in infrastructure, availability of qualified trainers, and resource allocation across districts contribute to inconsistencies in the quality of training delivery. Additionally, human resource constraints, including the lack of resource persons and competing programmatic responsibilities, affect effective planning and follow-up of training initiatives. Periodic updating of training courses remains a challenge due to the dynamic nature of healthcare guidelines, involvement of multiple stakeholders, and the need for continuous review, validation, and standardization of content across programs.

Further, the transition towards digital training has highlighted challenges such as inadequate internet connectivity, varying levels of digital literacy among healthcare workers, and occasional technical issues, which hinder effective participation. The current monitoring mechanisms largely

focus on training completion rather than evaluating the impact on knowledge, skills, and service delivery outcomes. Infrastructure gaps in several districts, despite ongoing efforts, continue to limit the establishment of fully functional and well-equipped training centers. Ensuring standardized, updated, and evidence-based training content across programs also remains a challenge due to the involvement of multiple stakeholders. Moreover, the need for a robust and responsive system for rapid training deployment during public health emergencies has been increasingly recognized.

12. Way Forward

In order to strengthen the training ecosystem and build a competent and responsive public health workforce, a comprehensive and integrated approach is required. Strengthening training governance through enhanced coordination among programme divisions and effective functioning of State and District Training Advisory Committees is essential. The digital training ecosystem, particularly the LMS portal, needs to be further enhanced and integrated with other health information systems to enable real-time monitoring, data-driven planning, and improved decision-making. Standardization of training content through the development of competency-based modules, aligned with national guidelines and updated periodically, will help ensure uniformity and quality across the state.

There is also a need to invest in capacity building of trainers by establishing a strong pool of certified master trainers across districts to ensure sustainability and consistency in training delivery. Monitoring and evaluation frameworks should be strengthened by incorporating outcome-based indicators, including assessments of knowledge retention, skill application, and field-level performance. Simultaneously, priority should be given to expediting the development and operationalization of training infrastructure, including modern training centres and skill labs.

Leveraging social media platforms and e-learning tools can significantly enhance the reach and flexibility of training programmes. Finally, developing structured rapid response training mechanisms and maintaining a trained pool of resource persons will ensure timely and effective capacity building during public health emergencies.

Annexure

LEARNING MANAGEMENT SYSTEM

Learning Management System

COMPREHENSIVE DOCUMENT



Sl. No	Contents
1	Learning Management System (LMS) – Overview
2	Introduction
3	Objectives
4	Vision & Mission
5	Platform Details
6	Training Programmes
7	Implementation Framework
8	Monitoring & Evaluation
9	Challenges
10	Way Forward

The screenshot displays the 'Medical Practitioners' section of the Kerala Health Training LMS. The interface includes a top navigation bar with links like Home, About Us, Courses, Course Guidance, FAQ, and Contact Us. A left sidebar contains icons for navigation. The main content area features a grid of training modules:

- Infection Prevention and Control – COVID 19 Context:** Infection Control Covid 19 – Newer Perspectives
- SHORT COURSE ON COVID 19 MANAGEMENT IN CHILDREN:** Covid 19 Management In Children
- A SHORT COURSE ON NATIONAL PROGRAMME FOR PREVENTION & CONTROL OF CANCER, DIABETES, CARDIOVASCULAR DISEASE AND STROKE (NPCDCS):** NPCDCS
- A SHORT COURSE ON COVID 19 TREATMENT GUIDELINE KERALA STATE VERSION 4 SPECIALITY PERSPECTIVE:** Covid 19 Treatment Guideline Kerala State Version4 – Speciality Perspective.
- TRAINING ON NATIONAL TOBACCO CONTROL PROGRAM**
- TRAINING ON NATIONAL AIDS CONTROL PROGRAM**
- ONLINE TRAINING ON NATIONAL TUBERCULOSIS ELIMINATION PROGRAM**
- TRAINING ON INTEGRATED DISEASE SURVEILLANCE PROGRAM**

The URL at the bottom is <https://keralahealthtraining.kerala.gov.in/course/view.php?id=24>.

LEARNING MANAGEMENT SYSTEM (LMS)

DEPARTMENT OF HEALTH & FAMILY WELFARE, GOVERNMENT OF KERALA

1. Learning Management System (LMS) – Overview

The Learning Management System (LMS) is one of the key innovative initiatives implemented in the health sector with the support of digital technology. It is an online training platform developed collaboratively by the Kerala Health Department, the National Health Mission (NHM), and the Centre for Development of Imaging Technology (C-DIT), with the objective of providing need-based, structured, and accessible training to healthcare personnel and volunteers across the State.

The LMS currently operates on the Moodle platform. The system has been developed by C-DIT, Thiruvananthapuram, which also provides the required technical support and maintenance. The platform is designed to ensure a user-friendly learning experience and is managed by the State Training Division.

The LMS facilitates features for systematic documentation and tracking of trainees' activities, thereby enhancing monitoring and evaluation of training outcomes. The Kerala Health Sector has pioneered the integration of Information and Communication Technology (ICT) to strengthen its human resources. Recognizing the need for continuous skill upgradation of health functionaries without disrupting essential services, the Training Division of NHM Kerala established a virtual knowledge management. Transitioning from traditional classroom settings, the LMS provides a decentralized, self-paced, and standardized environment for in-service education, ensuring that even the most remote health workers have access to updated clinical protocols.

The system has been functioning efficiently and has significantly contributed to strengthening the capacity-building initiatives of the Health Department. At present, a total of 54 from the Health Services department have been enrolled in the Learning Management System.

2. INTRODUCTION

The Learning Management System (LMS) is a digital platform established to enhance capacity building of healthcare personnel across Kerala. The Learning Management System (LMS) is a comprehensive digital platform established with the objective of strengthening capacity building initiatives among healthcare personnel across the State of Kerala. It serves as a centralized mechanism for planning, delivering, and monitoring training programmes in a structured and efficient manner. The platform facilitates continuous learning and skill enhancement for various categories of healthcare workers, thereby contributing to improved quality of healthcare service delivery.

The LMS has been developed through a collaborative effort involving multiple key stakeholders:

- **Department of Health & Family Welfare, Government of Kerala:** Providing overall policy direction, administrative support, and integration with the State health system.
- **National Health Mission (NHM):** Extending financial support, programme guidance, and facilitating implementation across districts.
- **Centre for Development of Imaging Technology (C-DIT), Thiruvananthapuram:** Acting as the technical partner responsible for platform development, customization, maintenance, and continuous technical support.

This multi-institutional collaboration ensures that the platform is both technically robust and aligned with the operational requirements of the health sector.

The LMS enables a range of functionalities that support effective training management:

- **Centralized Training Delivery:** All training programmes are hosted on a single platform, ensuring uniform access and streamlined administration across the State.
- **Standardized Content Dissemination:** Training materials, guidelines, and modules are developed and distributed in a consistent format, ensuring uniformity in knowledge transfer.
- **Continuous Professional Development:** The platform promotes ongoing learning by providing access to updated courses, refresher trainings, and skill enhancement modules for healthcare personnel at all levels.

The LMS is designed to support multiple modes of learning to cater to diverse user needs:

- **Recorded / Self-paced (Asynchronous) Learning:** Allows users to access training materials, recorded sessions, and modules at their convenience, ensuring flexibility and better retention of knowledge.

This mode approach enhances accessibility and ensures that training can be undertaken without disrupting routine service delivery.

3. OBJECTIVES

- To ensure uniform and standardized training across all levels of healthcare delivery by providing structured training modules that are consistent in content, quality, and delivery. This helps in maintaining uniformity in knowledge dissemination and adherence to standard treatment protocols and operational guidelines across the State.
- To provide accessible and flexible learning opportunities to all categories of staff, including medical officers, nursing personnel, MLSPs, ASHAs, and other field-level workers. The platform enables users to participate in training programmes irrespective of geographical constraints and allows them to learn at their own pace and convenience.
- To strengthen service delivery by enhancing the knowledge base, technical competencies, and practical skills of healthcare personnel. By equipping staff with updated information and best practices, the LMS contributes to improving the overall quality, efficiency, and effectiveness of healthcare services.
- To enable rapid dissemination of Government guidelines, policies, and protocols in a timely manner. The platform serves as an effective communication channel for cascading critical information during routine operations as well as during public health emergencies.
- To build a sustainable and scalable system for continuous capacity building within the health sector. The LMS ensures ongoing professional development through periodic training, refresher courses, and updated learning modules, thereby fostering a culture of continuous learning.

4. Vision & Mission

Vision

To establish a world-class digital learning ecosystem that ensures every healthcare professional in Kerala is equipped with the latest medical knowledge and evidence-based practices to provide high-quality, equitable healthcare.

Mission

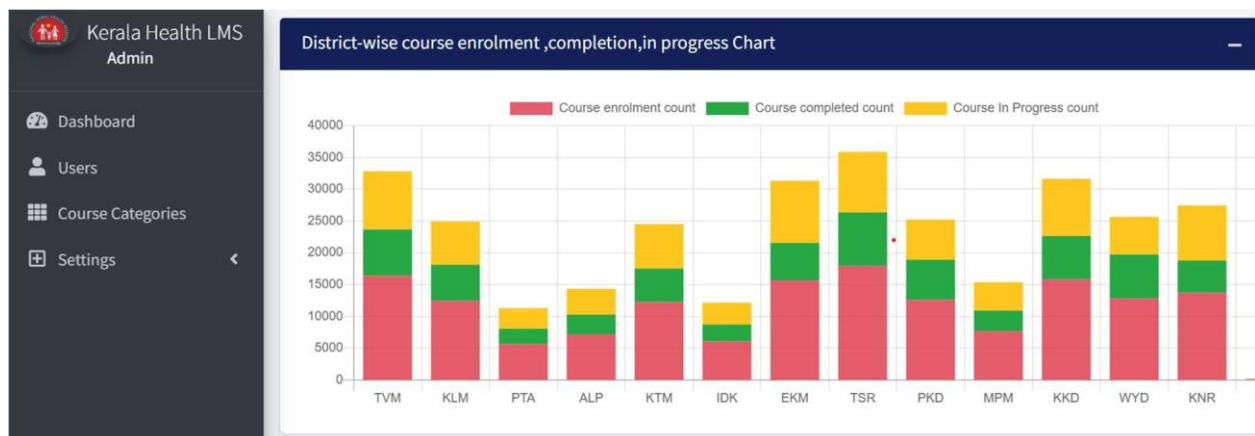
- **Standardization:** To deliver uniform training content across all levels of the healthcare hierarchy.
- **Accessibility:** To provide 24/7 access to learning resources for on-field staff.
- **Capacity Building:** To bridge skill gaps through data-driven analysis and reporting.
- **Sustainability:** To reduce the logistical and financial burden of physical training sessions.

5. Moodle Platform

The core of the Kerala Health Training portal is built on **Moodle**, a robust, open-source learning platform.

- **URL:** <https://keralahealthtraining.kerala.gov.in/>
- **Key Features:** It supports video lectures, PDF resources, and automated certification. The platform allows for "Self-Paced" learning, where participants can revisit modules as needed.

5. Monitoring Laravel Platform



While Moodle handles the learning experience, a separate **Laravel-based Monitoring and Reporting System** (<https://www.monitoring.keralahealthtraining.kerala.gov.in/>) is utilized for administrative oversight.

- **Function:** It tracks district-wise progress, user completion rates, and performance analytics.
- **Impact:** It enables State and District Program Managers to identify lagging areas and ensure 100% training coverage for mandatory courses.



6. Courses Offered under divisions

The LMS hosts over **170 courses** spanning various domains:

- **Maternal & Child Health:** Born Too Soon (Newborn Care), HBYC, and MBFHI Assessor Training.
- **Communicable/Non-Communicable Diseases:** NCD screening, TB elimination (NTEP), and COVID-19 management.
- **Specialty Corner:** Management of Medical Emergencies and Nursing management of surgical conditions.
- **Public Health Programs:** Aardram Mission, Janakeeya Arogya Kendram (AB-HWC) protocols, and Immunization/AEFI.
- **e-Health:** Training on Hospital Management Information Systems (HMIS) for Medical Officers and Pharmacists.
- **Janakeeya Arogya Kendram (AB HWC)**
- **Administrative Corner**
- **Emergency Management**
- **Quality related training**
- **Mental Health**
- **National Health Programs**
- **Immunization and AEFI**
- **CPHC Treatment guidelines**
- **Pharmacy related training**
- **Maternal health**
- **Palliative related training**
- **Child Health**
- **General Topics**
- **Lab Related Training**
- **Born Too Soon**

Essential Trainings for MLSP (Mid-Level Service Providers)

A prominent component of the LMS is the **Essential Training for MLSPs**.

- **Objective:** To certify Staff Nurses as Mid-Level Service Providers
- **Structure:** Includes intensive modules on primary care, followed by rigorous online examinations (MLSP Exams) conducted through the platform. Passing these exams is a prerequisite for placement and performance-based incentives.

Training of Mid-Level Service Providers

Date of first initiation of MLSP trainings through LMS platform	09/03/2021
Number of batches of trainings completed till date	7 (Seven)
Number of MLSPs who completed training and passed examination	5560 (Total certificate count of all batches)
Number of MLSPs who completed training and awaiting examination at present	403 (8th batch total)
Number of MLSP in Progress	2425

LMS trainings

Batch	Date of initiation	Number of persons enrolled	Number of MLSPs who completed the module	Date of examination	Number of MLSPs who attended and passed the examination
1	09/03/2021	1687	1687	December 2021	1687
2	22/07/2022	283	283	December 2022	283
3	30/05/2023	163	163	July 2023	163
4	20/07/2023	476	476	August 2023	476
5	27/09/2023	1530	1530	December 2023	1530
6	01/07/2025	982	982	July 2025	982
7	25/08/2025	439	439	August 2025	439

Clinical training of MLSPs

Date of initiation of clinical training for MLSPs in the state	09/03/2021
Number of MLSPs who underwent clinical training till	5560

7.. Beneficiary Cadres and Registered Users

The platform caters to a wide spectrum of health personnel:

- **Beneficiary Cadres:** Medical Officers, Specialists, Staff Nurses (MLSPs), Pharmacists, Lab Technicians, Health Inspectors/Supervisors (HI/JHI), Public Health Nurses (PHN/JPHN), Ministerial Staffs, Epidemiologists, RBSK, Palliative Nurses, Paramedical Staffs, Radiographers, ASHA workers, etc..
- **Registered Users:** Currently, the platform supports over **53,719 registered users** with continuous growth as new cadres are onboarded for mandatory training.

8. PLATFORM DETAILS

Technology Platform:

Moodle-based Learning Management System :- The Learning Management System is developed on the Moodle platform, which is a widely recognized open-source LMS known for its flexibility, scalability, and robustness. The platform supports a variety of learning formats, including video-based training, quizzes, assignments.

Technical Support:

Developed and maintained by C-DIT:- The LMS has been developed and is continuously maintained by the Centre for Development of Imaging Technology (C-DIT), Thiruvananthapuram. C-DIT provides end-to-end technical support, including system development, customization, server management, troubleshooting, and periodic upgrades to ensure optimal performance.

Key Technical Features:

The platform incorporates several advanced technical features to ensure efficiency, security, and scalability:

- **Role-based Access Control:** Ensures that users can access content and functionalities based on their designated roles and responsibilities.
- **Secure Login System:** Implements authentication mechanisms to protect user data and maintain confidentiality.
- **Scalable Infrastructure:** Designed to handle a large number of users simultaneously without compromising system performance.
- **Integration-ready Architecture:** Enables potential integration with other digital health platforms and systems used within the health department.

Capacity

This capacity ensures that large-scale training programmes can be conducted efficiently without the need for physical gatherings.

User Interface:

The platform is designed with a user-friendly interface to facilitate ease of use for all categories of users. Special emphasis has been given to ensure that even users with limited digital literacy can navigate the system, access training materials, and participate in sessions without difficulty.

Key Features

1. **Record Keeping:** The LMS maintains detailed records of each participant's training activities. It tracks their progress, certifications, and attendance.
2. **Collaboration:** Healthcare professionals from different agencies, including the State Health Department, National Health Mission - various program divisions, District Medical Officers, District Program Managers, KSIHFW, and SHSRC, can all access and participate in courses through the LMS.
3. **Focus on Primary Healthcare:** The LMS plays a crucial role in training Ayushman Bharat - HWC (Health and Wellness Center) workers. It equips them with the necessary skills for comprehensive primary healthcare delivery.
4. **Quality Assurance:** Kerala consistently ranks among the top states in India in terms of healthcare indicators. The LMS contributes significantly to maintaining this high standard.
5. **MLSP Program:** MLSP (CHO), who are posted in Kerala's sub-centers provide comprehensive primary healthcare as part of the Ayushman Bharat - Health and Wellness Centers (HWC) initiative. The MLSP program in LMS aims to empower MLSP nurses with complete training on healthcare management and strengthening the healthcare delivery system
6. **Course Variety:** The LMS hosts a diverse range of courses related to healthcare. These courses are designed to meet the specific needs of healthcare professionals across different domains.

ENROLLMENT STATUS

Total Users Enrolled: **53,719**

Category-wise Distribution:

Sl No	Category	Users
1	Medical Officers	4254

2	Staff Nurses	10747
3	MLSPs	6272
4	ASHAs & Field Staff	9679
5	Programme Staff	6730

9. DISTRICT-WISE COVERAGE

The Learning Management System (LMS) has been successfully implemented across all districts of Kerala, ensuring statewide coverage and uniform access to training resources. The platform enables equitable participation from healthcare personnel working at various levels.

District-wise Enrollment:

District	Users Enrolled
Thiruvananthapuram	4977
Kollam	3431
Pathanamthitta	2537
Alappuzha	3320
Kottayam	3464
Idukki	2297
Ernakulam	5495
Thrissur	4630
Palakkad	5219

Malappuram	4222
Kozhikode	5919
Wayanad	2370
Kannur	3604
Kasaragod	2234

10. TRAINING PROGRAMMES

The LMS platform facilitates a wide range of training programmes aligned with the priorities of the health sector. Major thematic areas include:

SL. No	MAIN CATEGORY	SUB CATEGORIES	
1	Janakeeya Arogya Kendram (AB HWC)	1	Janakeeya Arogya Kendram (AB HWC)
2	Administrative Corner	1	Kerala Service Rules Part - I
		2	Kerala Service Rules Part - II
		3	Kerala Service Rules Part - III
		4	Training On Court Proceedings And Related Office Matters
		5	Training On Procedures And Proceedings In RTI Related Office Affairs

		6	Basics Of Public Health Law For Health Care Workers
		7	Basic Training On COTPA Act For Health Care Workers
		8	Common Medico-Legal Issues In Primary Health Centres/Family Health Centres And Community Health Centres
		9	Soft Skill Development Course - KSIHFW
		10	Organisational Structure Of Health Services - KSIHFW
		11	Audit Issues
		12	Disciplinary Procedures (KSIHFW)
		13	Government Vehicle Management
3	Emergency Management	1	Basic Life Support
		2	Pediatric Advanced Life Support (PALS)
		3	Basic Newborn Resuscitation Program
		4	Basic Interpretations Of ECG

		5	Advanced Cardiac Life Support
		6	Acute Coronary Syndrome
		7	Stroke
		8	Training On Snakebite Management
		9	Disaster Management & Emergency Medical Services
4	Essential Training For MLSP's	1	Unit I - Aardram And Family Health Center Concept
		2	Unit II - Introduction To The Community/Public/Primary Health
		3	UNIT III Comprehensive Primary Health Care, Community Health Nursing And Introduction To Public Health In Kerala
		4	UNIT IV Family Health Center Skill Set For Staff Nurses
		5	UNIT- V Introduction To Community Mental Health
		6	UNIT VI - Infection Prevention And Control - Covid 19 Context

		7	UNIT VII - Introduction To E-Health And Role Of Nursing Officers In E-Health
		8	UNIT VIII – NCD Part I – SWAAS Program – Kerala COPD Control Program
		9	UNIT IX - Communicable Disease, Prevention And Management:Public Health Aspect
		10	Unit X Non Communicable Diseases
		11	Unit XI – Women Health
		12	Unit - XII - National And State Health Programs Part A
		13	Unit XIII - National And State Health Programs Part B
		14	Unit XIV - Elderly Care And National Health Program For Elderly Care
		15	Unit XV - Child Health
		16	Unit XVI - National And State Health Programs, Part C
		17	Unit - XVII - Maternal Care (Preconception Care And High-Risk Pregnancy)

		18	UNIT XVIII – Nursing Management Of Common Medical And Surgical Conditions In Primary Health Care
		19	Unit XIX - Palliative Service, Palliative Care Program And Rehabilitation Services
		20	Unit XX - Care Of The Child With Surgical Conditions
		21	Unit XXI - Care Of Child With Medical Conditions
		22	Unit XXII Basic Investigations In Primary Health Care
		23	Unit XXIII - Disaster Management & Emergency Medical Services
		24	Unit XXIV - Health Education, Records And Reports In Hospital
		25	Unit XXV - Leadership And Communication
		26	Unit XXVI - Public Health Law & Ethical/Legal Issues In Nursing
		27	Unit XXVII Occupational Diseases, Oral Health
		28	Unit XXVIII - Miscellaneous Topics

5	Specialty Corner	1	CKD In Primary Health Care Settings
		2	Diet In CKD
		3	Cancers
6	Communicable Diseases	1	Short Course On Nipah Virus Outbreak
		2	Training On Rabies, Prevention And Management
		3	COVID 19 TREATMENT GUIDELINE KERALA STATE VERSION 4 – SPECIALTY PERSPECTIVE
		4	Covid 19 Management In Children
		5	Infection Prevention And Control – COVID 19 Context
		6	Training On Kala Azar (Leishmaniasis) For Lab Technicians
		7	Vector Control Activities And Prevention Of Mosquito Borne Diseases
		8	Health Care Associated Infection (HAI) - KSIHFW
		9	Acute Diarrhoeal Disease And Oral Rehydration - KSIHFW

		10	Integrated Disease Surveillance Programme (IDSP) - KSIHFW
		11	Major Disease Causing Mosquito Identification
		12	Communicable Disease, Prevention And Management : Public Health Aspect
		13	NIPAH - Update & Management
7	Non Communicable Diseases	1	Non Communicable Diseases
		2	SWAAS Program – Kerala COPD Control Program
		3	Training On Management Of Diabetes Mellitus And Hypertension
8	Quality Related Training	1	Saqsham Portal - District Level Demonstration
		2	Overview Of Quality Management System For AEFI Surveillance
		3	Immunization Site Checklist (NQAS For AEFI)
		4	District Level Checklist (NQAS For AEFI)
		5	State Level Checklist NQAS For AEFI Surveillance Program

9	Mental Health	1	Introduction To Community Mental Health
		2	Mental Health Issues In Elderly (KSIHFW)
		3	Stress Management
10	National Health Programs	1	Training On Palliative Care Programs And Palliative Care Services
		2	Mental Health Programs In Kerala
		3	National Programme For Health Care Of Elderly
		4	National Program For Control Of Blindness And Visual Impairment
		5	National Family Planning Program And RTI/STI Control Program
		6	School Health Program In Kerala
		7	National Leprosy Eradication Program
		8	Integrated Disease Surveillance Program
		9	National Vector Borne Disease Control Program

		10	National Tuberculosis Elimination Program
		11	National AIDS Control Program
		12	National Tobacco Control Program
		13	National Programme For Prevention & Control Of Cancer, Diabetes, Cardiovascular Disease And Stroke (NPCDCS)
		14	National Health Programs (Overview) - KSIHFW
11	Immunization And AEFI	1	Training On Immunization
		2	Overview Of Immunization And AEFI Surveillance
		3	Basic Concepts In AEFI Surveillance
		4	Guidance For Conducting Post-Mortem Examination In Vaccination Deaths
		5	AEFI Surveillance: Recording And Reporting
		6	AEFI - Case Investigation
		7	AEFI- Investigation Of Death Following Vaccination & Verbal Autopsy - Adult & Children

		8	AEFI- Conducting Verbal Autopsy
		9	AEFI- Causality Assessment & Importance Of Case Investigation
		10	Cold Chain Management (KSIHFW)
12	CPHC Treatment Guidelines	1	Management Of Hansen's Disease - Comprehensive Primary Health Care Clinical Guidelines
		2	Common Dermatological Conditions - CPHC Treatment Guidelines
		3	Obstetrics & Gynaecology - CPHC Treatment Guidelines
		4	Joint Pain - Comprehensive Primary Health Care Clinical Guidelines
		5	Palliative Care - Comprehensive Primary Health Care Clinical Guidelines
		6	Ear, Nose, Throat - Comprehensive Primary Health Care Clinical Guidelines
		7	Emergency Care, Comprehensive Primary Health Care Clinical Guidelines
13		1	DRUGS AND COSMETICS ACT - KSIHFW

	Pharmacy Related Training	2	Training On DDMS Software Operation Procedures
		3	Training On Good Dispensing Practice And Patient Counselling
		4	Basic Training On Important Laws On Pharmacy Practice For Health Care Workers
		5	Latest Trends In Pharmacy - KSIHFW
		6	Storage And Maintenance Of Drugs - KSIHFW
14	Maternal Health	1	Women Health
		2	Maternal Care (Preconception Care And High-Risk Pregnancy)
		3	Hypertensive Disorders In Pregnancy - Classification & Diagnosis
		4	Hypertensive Disorders In Pregnancy - Management & Analysis
15	Palliative Related Training	1	Palliative Service, Palliative Care Program And Rehabilitation Services
16	Child Health	1	Child Health

		2	Care Of Child With Medical Conditions
		3	Care Of The Child With Surgical Conditions
		4	Training Program On Clubfoot Management
		5	Training On Home Based Care For Young Children (HBYC)
		6	MBFHI ASSESSOR TRAINING PROGRAM
		7	Facility Based Integrated Management Of Neonatal And Childhood Illness (F-IMNCI)
17	E Health	1	Training To Hand Holding Support Staff On Ehealth
		2	Training For Institution Liaison Officer In Ehealth
		3	Training For Medical Officer Incharge And Superintendents
		4	Training On Ehealth Module For Medical Officers
		5	Training On Nursing Module In Ehealth
		6	Training On Billing Module In Ehealth

		7	Training On Annual Health Screening & Shaili Application
		8	Training On Pharmacist Module In Ehealth
		9	Training On Lab Technician Module In Ehealth
		10	Training On Reception Module In Ehealth
		11	Training On Call Center Module In Ehealth
		12	Training On Public Health Modules For State And District Nodal Officers, Ehealth
		13	Training For District Project Engineers, Ehealth
		14	Training For JHI And JPHN In Public Health Sector, Ehealth
		15	Training On Public Health Modules For Public Health Admins, Ehealth
		16	Training On Public Health Modules For Public Health Supervisors, Ehealth
		17	Training For District Admins, Ehealth

18	General Topics	1	HOSPITAL INFECTION CONTROL PRACTICES - KSIHFW
		2	HMIS & RCH Portals - KSIHFW
		3	Occupational Diseases, Oral Health
		4	Basic Investigations In Primary Health Care
		5	Nursing Management Of Common Medical And Surgical Conditions In Primary Health Care
		6	Aardram And Family Health Center Concept
		7	Health Statistics - KSIHFW
		8	Training On Antimicrobial Resistance Prevention And Awareness
		9	Basic Training For Nursing Assistants
		10	Disaster Preparedness And Management - KSIHFW
		11	Training On Overview Of Health And Nutrition - KSIHFW
		12	Proper Maintenance Of Lab Equipments - KSIHFW

		13	Training On Procedures Related To Condemnation In Health Care Institution
		14	Management Of Medical Emergencies
		15	ASHADHARA TRAINING: Management Of Patients With Hemophilia In Peripheral Setting As Per The State Treatment Plan
19	Lab Related Training	1	Laboratory Services In Health Service Department-Overview (KSIHFW)
20	Born Too Soon	1	Approach To Respiratory Distress In Newborn
		2	Preterm Delivery – Preparation And Stabilisation
		3	Thermoregulation, Kangaroo Mother Care (KMC), And Feeding Of Low-Birth-Weight Infants / Feeding Issues
		4	Infection Control Practices In Newborn Care / NICU
		5	Hypoglycemia – Current Concepts And Updates In Newborn Care
		6	Neonatal Sepsis And Antibiotic Stewardship
		7	Neonatal Hyperbilirubinemia – Current Concepts In Management

		8	Discharge Planning And Follow-Up Of Preterm Babies
		9	Heated Humidified And High Flow Oxygen Therapy And Continuous Positive Airway Pressure(CPAP)
		10	Mixed Bag – Neonatal Transport, Apnoea Of Prematurity, And Newborn Screening

11. IMPLEMENTATION FRAMEWORK

State Level Responsibilities

The State level plays a pivotal role in the overall planning, coordination, and monitoring of the LMS platform. The key responsibilities include:

- **Policy Decisions:**
Formulation of policies, guidelines, and strategic directions for the implementation and expansion of LMS across the State. This includes aligning training programmes with national and state health priorities.
- **Content Development:**
Development and validation of standardized training modules, course materials, videos, and assessment tools in consultation with subject experts. Ensuring that content is updated periodically in line with revised guidelines and protocols.
- **Overall Monitoring:**
Continuous monitoring of LMS performance, training progress, and participation levels across districts. The State team also reviews key indicators and provides necessary directions to districts for improvement.
- **Coordination with Stakeholders:**
Liaison with NHM, Directorate of Health Services, Medical Education, and technical partners such as C-DIT for effective implementation.

District Level Responsibilities:-District-level authorities are responsible for the effective execution and operational management of LMS activities.

Technical Support

Technical support is a critical component for the smooth functioning of LMS and is primarily handled by C-DIT.

- **Platform Maintenance:**
Regular maintenance of the LMS platform, including server management, system optimization, and ensuring uninterrupted availability of services.
- **Issue Resolution:**
Prompt identification and resolution of technical issues faced by users, including login problems, access issues, and system errors.
- **System Updates and Upgrades:**
Periodic updates to enhance system performance, introduce new features, and address security concerns.
- **Technical Assistance:**
Providing backend support and coordination with the State team for implementing new modules, features, or integrations.

12. MONITORING & EVALUATION

A comprehensive set of tools is utilized to monitor the performance and effectiveness of LMS:

- **LMS Dashboards:**
Updated dashboards provide insights into user activity, course participation, and completion status across districts.
- **Participation Reports:**
Detailed reports capturing attendance and engagement levels of participants in various training programmes.
- **Completion Tracking:**
Monitoring of course completion rates, assessment results, and certification status of participants.
- **Data Analytics:**
Analysis of usage patterns and performance indicators to assess the effectiveness of training programmes.

13. CHALLENGES

1 Connectivity Issues in Remote Areas

Limited internet connectivity in geographically remote and hilly regions poses challenges for uninterrupted participation in live training sessions and access to online content.

2 Digital Literacy Gaps Among Users

Variations in digital literacy levels among healthcare personnel affect the ease of use and adoption of the LMS platform, particularly among field-level staff.

3 Occasional Technical Issues

Users may encounter intermittent technical issues such as login difficulties, platform lag, or access errors, which can impact the training experience.

4 Operational Constraints

Balancing routine healthcare responsibilities with participation in training programmes can sometimes limit user engagement and completion rates.

14. FUTURE ROADMAP

The Learning Management System (LMS) has emerged as a transformative initiative in strengthening capacity building within Kerala Health by leveraging digital technology for training delivery. The platform has enabled standardized, accessible, and scalable training for healthcare personnel across all districts, ensuring uniform dissemination of knowledge and adherence to guidelines. By facilitating both live and self-paced learning, LMS has improved participation, enhanced skill development, and supported continuous professional education without disrupting routine healthcare services. Despite certain operational and technical challenges, the system has demonstrated significant impact through improved efficiency and service quality. With ongoing enhancements and proposed upgradation to a more advanced platform, LMS is expected to further evolve as a robust and sustainable tool, playing a critical role in strengthening healthcare delivery and workforce capacity in the State.

- **Mobile App Integration:** Developing a dedicated mobile application for offline learning access.
- **AI-Driven Analytics:** Implementing AI to suggest courses based on a worker's performance and skill gaps.

- **Virtual Reality (VR):** Introducing VR-based modules for complex surgical and emergency procedures.
- **Inter-Sectoral Training:** Extending modules to Public and local self-government (LSG) representatives for community health leadership.

Platform Upgradation

It is proposed to upgrade the existing Learning Management System (LMS) from the current Moodle-based platform to a more advanced **Laravel-based system IGNITE**. The proposed upgradation aims to enhance overall system performance, scalability, and user experience.

The new platform is expected to offer:

- **Enhanced Features:**
Introduction of advanced functionalities to support improved training delivery, user management, and reporting capabilities.
- **User-Friendly Interface:**
A more intuitive and simplified interface designed to cater to users with varying levels of digital literacy, thereby improving accessibility and ease of use.
- **Improved System Performance:**
Better speed, responsiveness, and stability, especially during high user load and live training sessions.
- **Resolution of Existing Limitations:**
The challenges and operational difficulties currently experienced in the Moodle platform, including navigation complexity, performance issues, and technical constraints, will be effectively addressed in the upgraded system.
- **Scalability and Integration:**
The new platform will be designed to support future expansion and integration with other digital health systems.

Also plans are in place to integrate Artificial Intelligence (AI)-based tools for personalized learning, adaptive assessments, and intelligent content recommendations.

Abbreviations List

- **AEFI:** Adverse Events Following Immunization
- **C-DIT:** Centre for Development of Imaging Technology
- **DHS:** Directorate of Health Services
- **FHC:** Family Health Center
- **HBYC:** Home Based Care for Young Child
- **LMS:** Learning Management System
- **MBFHI:** Mother and Baby Friendly Hospital Initiative
- **MLSP:** Mid-Level Service Provider
- **NHM:** National Health Mission
- **SHSRC-K:** State Health Systems Resource Centre - Kerala
- **KSIHFW** - Kerala State Institute of Health & Family Welfare
- **NQAS** - National Quality Assurance Standards



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