



RAMAIAH
International Centre for
Public Health Innovations



RAMAIAH
Medical College

Training Needs Assessment: Findings

*Training on techno-managerial skills
for doctors, nurses, and program managers under
the Meghalaya Health Systems Strengthening Project (MHSSP)*

**Ramaiah International Centre for Public Health Innovations
(RICPHI)**

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Acknowledgment

The Meghalaya Health Systems Strengthening Project (MHSSP) is funded by the World Bank and the National Health Mission, Meghalaya. MHSSP provides capacity-building support for healthcare providers to improve the efficiency and accountability in delivering day-to-day activities at Health Facilities at the State and District levels by developing clinical and techno-managerial skills of medical officers, block, and district level officials, and the nursing cadre of the Health Department of the State.

We, on behalf of Ramaiah Medical College (RMC) and Ramaiah International Centre for Public Health Innovations (RICPHI), would like to thank the stakeholders at the National Health Mission, Meghalaya, including Shri Ram Kumar S., IAS, Mission Director, National Health Mission and Project Director- MHSSP, Dr. Shaibya Saldanha, Training Consultant, MHSSP and Ms. Lakshmi Sripada, Human Resources for Health and Nursing Consultant, World Bank-India for placing their utmost trust in our capabilities to carry out this important assignment. Our thanks are due to Mr. Kmenbhalang Khongwir, Team Leader, MHSSP, and Dr. Carolinda langrai, Principal, Regional Health and Family Welfare Training Centre for helping us with relevant data as and when needed. Special gratitude to Ms. Ibamonlang Nongbri, State Program Manager, NHM, Meghalaya for her constant support and guidance at all times.

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The Ramaiah Medical College (RMC) and Ramaiah International Centre for Public Health Innovation (RICPHI), Bangalore have been jointly awarded the contract for providing capacity building support for health staff under the Meghalaya Health Systems Strengthening Project (MHSSP) to improve the efficiency and accountability in delivering day-to-day activities at health facilities at the State and District levels by developing clinical and techno-managerial skills of medical officers, block and district level officials, including the nursing cadre of the health department of the state. On behalf of the Ramaiah group, RICPHI is leading the implementation of the project.

The core team of RICPHI for MHSSP includes professionals from various backgrounds and experiences who conducted field trips, including meetings, interviews, and informal discussions. The team visited East Khasi Hills, Ri-Bhoi, East Garo Hills, West Jaintia Hills, West Garo Hills, and South Garo Hills where discussions were held with the Medical Superintendents, Medical Officers in charge, and other health care providers regarding challenges around training and the ecosystem at the facility level. This exercise enabled us to identify gaps around techno-managerial skills among healthcare providers which are required by them to adequately perform their roles.

The team worked together to develop this Training Needs Assessment (TNA) report for Meghalaya to better understand the gap areas and training lacunae in the state.

Abbreviations

ANM- Auxiliary Nurse and Midwife
 BLS- Basic Life Support
 BPM- Block Program Managers
 CHC- Community Health Centre
 CPHC- Comprehensive Primary Health Centre
 CRM- Common Review Mission
 DMHO- District Medical & Health Officer
 DNO- District Nodal Officer
 DVDMS- Drugs and Vaccines Distribution Management Systems
 ECD- Early Child care Development
 ENT- Ear Nose Throat
 HLA- Healthcare Leadership Alliance
 HOD- Head of Department
 HRMIS- Human Resources Management Information System
 IT- Information Technology
 IUCD- Intrauterine Contraceptive Device
 KPI- Key Performance Indicator
 M&E- Monitoring and Evaluation
 MHSSP- Meghalaya Health Systems Strengthening Project
 MLHPs- Mid-Level Health Providers
 MOs- Medical Officers
 MOTHER app- Meghalaya's Outcomes oriented Transformation in Health, nutrition, Education and Rural Development Programme
 MS- Medical Superintendent
 NCD- Non-communicable disease
 NHM- National Health Mission
 NHP- National Health Policy

NS- Nursing Superintendent
 OB & GYN- Obstetrics and gynaecology
 PDCA- Plan Do Check Act
 PG- Post-Graduation
 PHC- Primary Health Centre
 PIP- Program Implementation Plan
 PM-BOK- Project Management Book of Knowledge
 PMA- Project Management Agency
 QOC- Quality of care
 R&D- Research and Development
 RAPS- Risk Assessment and Problem Solving
 RBSK- Rashtriya Bal Swasthya Karyakram
 RHFWTC- Regional Health & Welfare Training Center
 RICPHI- Ramaiah International Centre for Public Health Innovations
 RKSK- Rashtriya Kishore Swasthya Karyakram
 RMC- Ramaiah Medical College
 RMNCH+A- Reproductive, Maternal, Newborn, Child and Adolescent Health
 RUAS- Ramaiah University of Applied Sciences
 SBA- Skilled Birth Attendant
 SN- Staff Nurse
 SOP- Standard Operating Procedure
 STC-NHM - State Training Cell, National Health Mission, Meghalaya
 SUMAN- Surakshit Matritva Aashwasan scheme
 TM- Techno-managerial
 TNA- Training Needs Assessment
 ToT- Training of Trainers
 UNICEF- United Nations Children's Fund

Table 1: Abbreviations

***"It is not the strongest of the species that survives,
nor the most intelligent that survives. It is the one that
is the most adaptable to change"***
-Charles Darwin

- **Background**
- **Objectives of TNA**
- **Activities undertaken**
- **Methodology: Literature and Desk Review**
- **Stakeholder insights**
 - **Field visits**
 - **RAPS workshops**
 - **Skill lab visits**
 - **State training**
- **Opportunities for leverage**
- **Way forward**

National Health Policy (NHP 2017)

- Commits to the highest professional standards, integrity and ethics in the entire system of healthcare delivery in the country.
- Recommends development of leadership skills and strengthening of human resource governance in the public health system
- Aims to have the most appropriate person, in skills and motivation, for the right job in the right place, working within the right professional environment

Meghalaya Health Policy

Aims

To provide **affordable, patient-centric**, universal, preventive and curative healthcare to all the residents using the rights-based approach

Focuses

On **human resource development, and capacity building** of the workforce to ensure the availability of **capable, well trained, determined** individuals in the health system

- MHSSP focuses on **improving management capacity, accountability, and strengthening governance**
- The current project provides capacity-building support for medical officers, and nurses to **improve efficiency and accountability** in delivering day-to-day activities at Health Facilities by developing clinical and techno-managerial skills
- Need for building resilient health systems especially post COVID
- Building the T-M skills of the workforce will contribute to the same



Objectives of TNA

01

Examine the domains and depth of the techno-managerial skills covered by training modules, TOT modules, and implementation guidelines

02

Identify the perceived needs for TM skills, preferred mode of learning, content, and delivery methods among healthcare providers and managers

03

Identify critical gaps in training of health care providers:

- Motivation and attitude
- Training calendar
- Post-training application
- Training ecosystem

04

Map the TM skills required for various cadres of healthcare providers and managers at all levels of the health system

Activities Undertaken

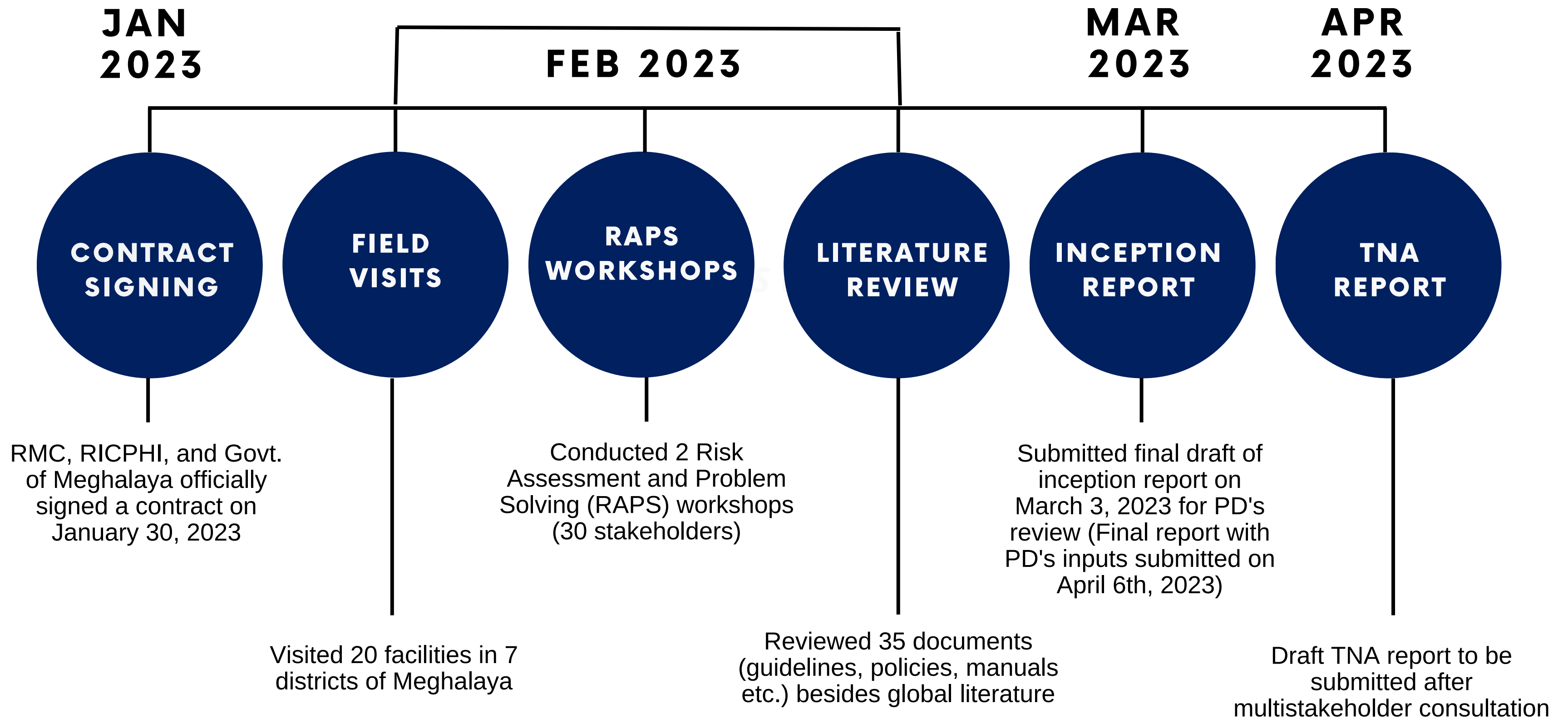


Fig 1: Activities undertaken for TNA



Methodology

Training related literature

Research articles

Standard guidelines

Document review

Policy documents

Operational guidelines and training manuals

Evaluation reports

Participants' perspective

Stakeholder interviews

RAPS Workshops

DMHO Conference

Skill lab assessment



Literature on T-M skills for healthcare providers

RESEARCH
PAPERS

INTERNATIONAL
STANDARDS

List of guidelines reviewed

The following research papers and international guidelines were extensively reviewed as part of the literature review to capture the relevant practices taking place nationally and globally.

On-site mentorship model, Rwanda	World Economic Forum's 21st Century Skills
Ghana leadership development program	Global Healthcare Management Competency Directory
Core competencies for health headquarters	International Labour Organization (ILO) Framework
Project Management Body of Knowledge (PMBOK) guide 7th edition	Education 4.0 guidelines

Table 2: List of guidelines reviewed for TNA

For additional information on guidelines and literature reviewed, refer to pages 53-59



Desk Review of T-M skills for healthcare providers

**POLICY
DOCUMENTS**

**OPERATIONAL
GUIDELINES
AND REPORTS**

Objectives of Desk Review

01

Identify the techno-managerial concepts covered by 'Training of Trainer' modules and implementation guidelines of the state and central programs

02

List out management tools and techniques recommended or suggested for program implementation

03

Identify a tentative list of T-M skills needed for program implementation

List of documents reviewed

The following documents were extensively reviewed as part of the desk review to capture important guidelines mandated by the central and state agencies

National and State Health Policy	Rescue Mission guidelines
LaQshya operational guidelines	ECD mission document
LaQshya SOP for District Hospitals	PIP for the year 2022-24
Dakshata operational guidelines	Common review mission report (2022)
DAKSH skills lab for RMNCH+A services	Presentations from agencies IQVIA HRH enumeration report NRSRC HRH Situational analysis
SUMAN operational guidelines	CPHC guidelines

Table 3: List of documents reviewed for TNA

For additional information on documents reviewed, refer to pages 60-65

Document Review: Summary

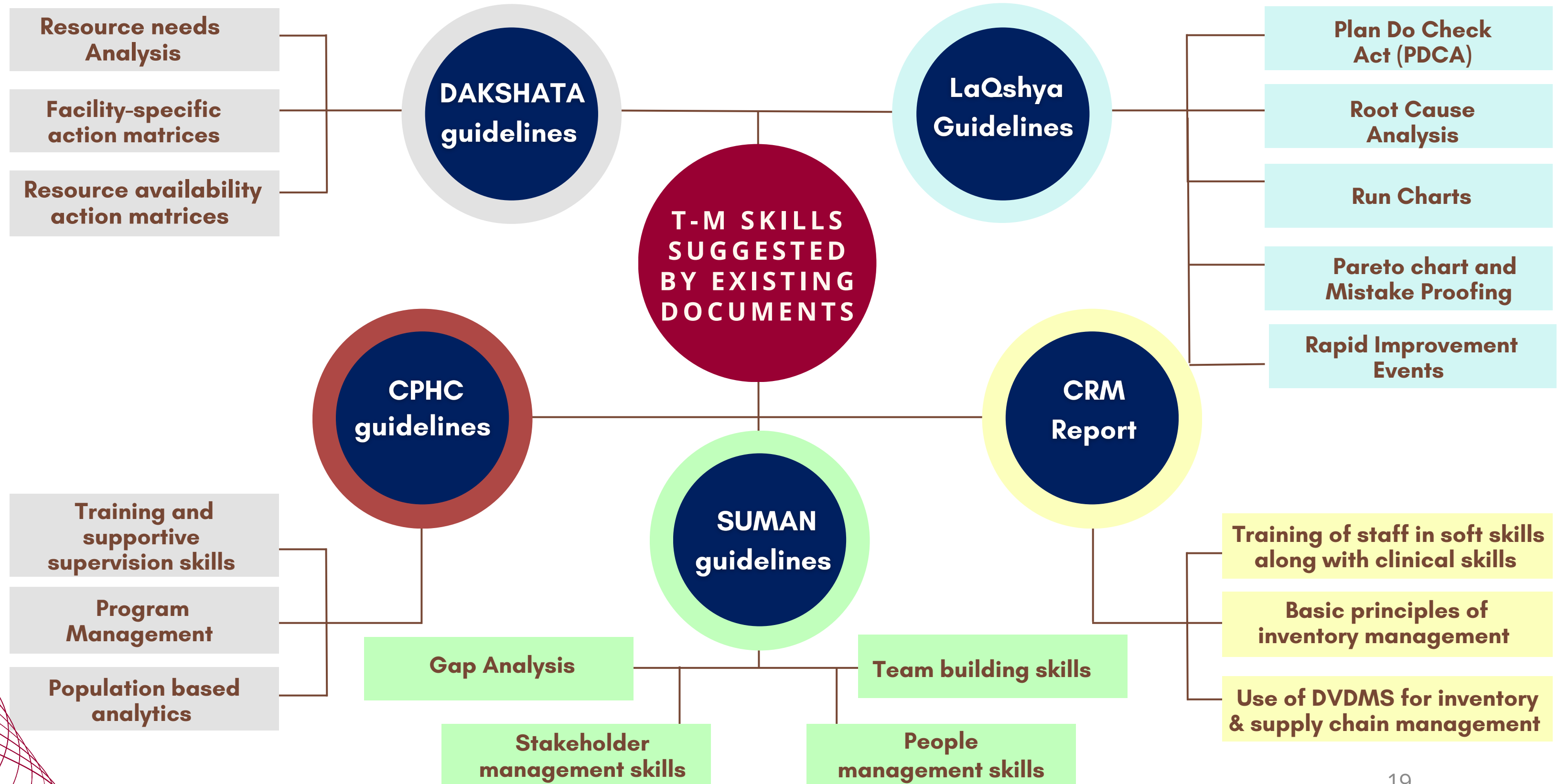


Image 1: Compiled observations of document review



Stakeholder insights

(RAPS workshops + Field insights + Skill lab assessments
+State training+ Leaderboard activity)

"If my training does not help the people I serve, it serves no purpose"

- DMHO



Facility visits

Objectives of facility visits

- 01** Understand the perceived needs and gaps in techno-managerial skills among healthcare providers that are required to adequately perform their roles.
- 02** Probe and document user preferences on the mode of learning, content and delivery methods, the applicability of skills and potential challenges.
- 03** Assessment of IT skills and data-driven decision-making capabilities of healthcare providers.
- 04** Explore mechanisms to monitor and assess the training from learning and action.
- 05** Provide inputs to subject matter experts for content development around T-M skills

Facilities: What we covered

7 districts

15 blocks

20 facilities

80 stakeholders

Mentioned in the forthcoming pages are some challenges around trainings which emerged from our stakeholder interactions:

Training-related:

- Insufficient follow-up, refresher training for any cadre
- More focus on clinical curative care training to the MOs rather than T-M skills

Application of training:

- Trainees (e.g. MOs) trained at the State/District level are seldom motivated to cascade trainings at peripheral/facility level
- Inadequate skills at the facility level among all cadres in data-driven decision making

Ecosystem (systems and infrastructure)

- Scarce incentives for attending trainings
- Insufficient logistic support and task distribution that could aid participation in training programs
- Budget allocation for training is inadequate and release is delayed in many districts.

Scheduling

- MOTHER app etc. - Training limited to field workers and program managers for data entry
- MOs (CHCs/PHCs) - insufficient training in data-driven decision making which depends on reports from district data manager.
- Little ownership in designing and poor adherence to the training calendar during the implementation

Ecosystem: Motivation & Attitude

- Small % of PHC MOs are retained in public health service as most MOs prioritize securing a PG seat.
- Training seen as a burden by MOs.
- Training provided by local MOs are not received well by field staff as compared to external resources
- Lack of culture for MOs to provide on-the-job training to subordinate staff (for receiving training, the staff is dependent only on district level training)

The stakeholder preferences for training delivery which arose from our interactions are listed below:

- Problem-solving workshops
- Focus on audio-visual aids, role-plays on case vignettes: (local socio-cultural context), simulations, and small-group discussions
- Training to be concise, fun, interactive, and non-didactic in an informal setting
- Experiential learning – facility visits for knowledge sharing
- Training materials repository to be shared with everyone via an app
- Preferences on traits of the trainers–enthusiastic, engaging, adult learning techniques
- Context-specific curriculum that helps knowledge transfer for all cadres
- Closing the loop: Classroom training followed by hands on and follow up training

“By listening, we learn 50%, by observing 80%, and by doing we learn 99%.”

Recommendations: Measurement and evaluation

The stakeholders threw light (points below) on possible mechanisms for monitoring and assessment of the training-learning as well as evaluation of conversion of training to performance.

- Common minimum KPIs (Key Performance Indicators)
- Constant monitoring, supportive supervision, hand-holding, and reinforcement to improve absorption and utilization of training.
- Community feedback and engagement, patient response.
- Achievement of program targets (immunization, SBA) can be monitored through apps.
- Healthy competition among facilities, blocks, districts on the lines of Kayakalp with pre-set criteria and guidelines.
- Self-assessment and peer evaluation: M&E of trainings mainly by district health authorities aided by the agency
- Conversion of training to action to be evaluated by district health authorities

Findings: IT skills and data-driven decision making

- Senior doctors, nurses, and field staff find it difficult to learn and adapt to program applications (apps). They need supportive supervision and hand-holding even after multiple trainings.
- Training on the MOTHER app and other program applications is limited to data entry and is predominantly done for field workers and program managers. The MOs, unless self-motivated, are not aware of how to manage data from these apps for gaining insights.
- MOs of CHCs and PHCs are not trained in data-driven decision-making and wait for the reports and data from district data managers.
- HMIS data and reports are used by select MOs for self-assessment of key indicators at the facility level.

For additional information on facility visits, refer to pages 66-68

Risk Assessment and Problem Solving (RAPS) Workshops

For additional information on RAPS, refer to pages 70-71

Risk Assessment & Problem Solving (RAPS) Workshops

- Innovative approach to consensus building developed from principles of group dynamics, participatory research, and design thinking
- Facilitates decision-making in heterogenous groups
- Highly successful in addressing bottlenecks and generating potential ideas/prototypes to address the challenges

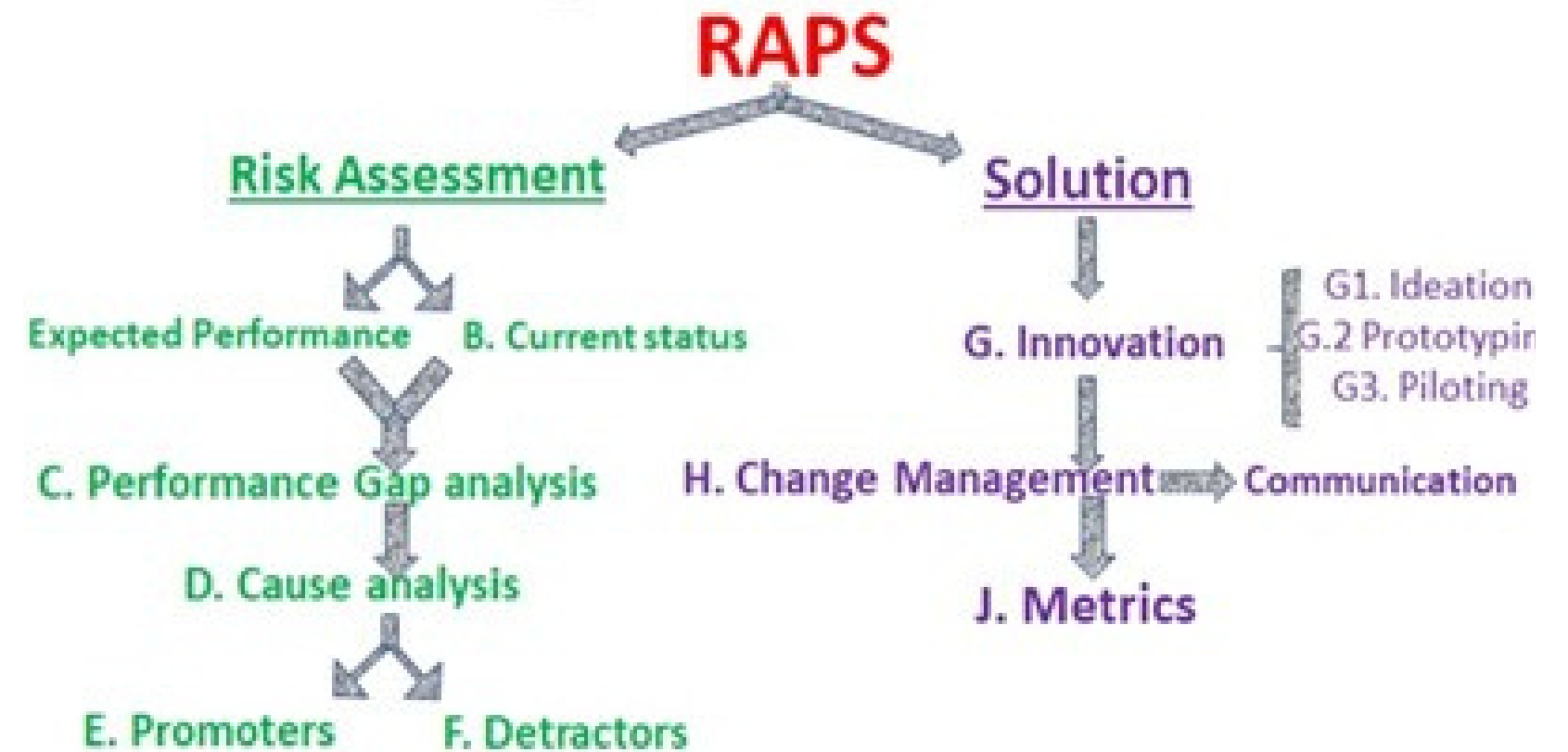


Image 2: RAPS flow and sequencing of activities

- Two workshops conducted with multiple stakeholders from MHSSP in February 2023

“I was thinking it will be training where I can come out anytime because I have a very busy schedule with lots of files waiting on my table. But what happened!! I am still here....it was so interesting and very interactive. It was a good process for me.”

- Dr. V.G. Momin, Deputy Director, Health Education Bureau

Objectives of RAPS-1

01

Identify critical issues hampering training on the ground especially around:

- Content-related gaps,
- Challenges around the training calendar,
- Application of lessons learned,
- Challenges in the training ecosystem

02

Prioritization and clustering of the most important of the critical issues identified earlier.

03

Preliminary ideation of some potential solutions to combat the bottlenecks in training identified earlier

Results- RAPS 1

The figure below represents the cluster wise gaps and challenges identified as an output of the first RAPS workshop

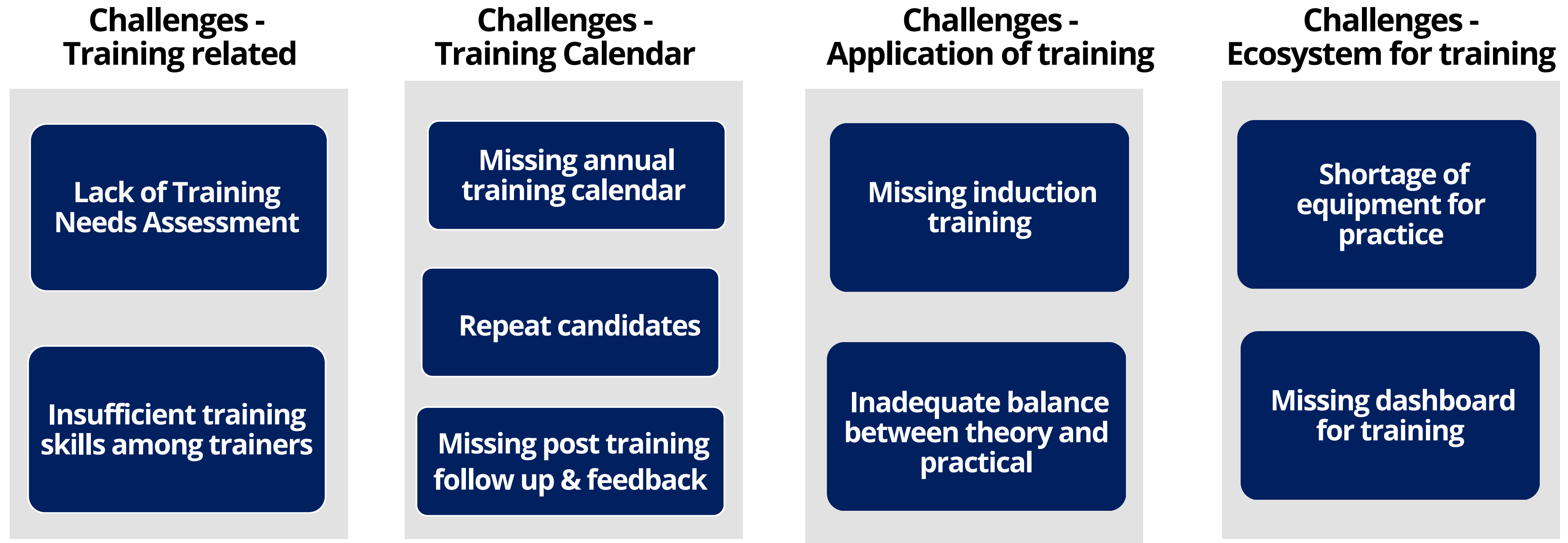


Fig 2: RAPS 1 workshop outcomes

“Not only exciting, but mind blasting session”

- Dr. H.W. Laloo, ENT Specialist, Ganesh Das Hospital

Objectives of RAPS-2

01

Enumerate the list of roles identified cadre wise

02

Map skills and competencies for effective and efficient healthcare delivery to the roles identified

03

Arrive at a consensus with regard to the most critical competencies according to the roles identified

"...and I am really sure that with these series of workshops and trainings, we will be able to come up with a better and dignified centre of training for the state and for the district as well."

- Dr. Flourish Lyngdoh, RSKS Programme Officer

The table below depicts the list of competencies/skills identified by Doctors, Nurses and Program Managers as part of the output of the second workshop.

Group 1: Doctors	Group 2: Nurses	Group 3: Program Managers
<ul style="list-style-type: none"> • People Management • Frugal Innovation • Self directed learning • Leadership • Communication: Interpersonal and counselling • IT skills • Crisis management • Teaching and training skills • Mentoring • Planning and implementation • Finance management • Legal knowledge 	<ul style="list-style-type: none"> • Empathy and patience • Listening skills • Speaking skills • IT skills • Teaching and training skills • Confidence • Leadership • Problem solving 	<ul style="list-style-type: none"> • People Management • Communication • Leadership • Decision making/Problem Solving • Accountability • Ethics • Financial skills • Supply chain • Self-directed learning • Performance assessment • IT skills • Data management and evaluation • Program planning and implementation • Documentation • Public health and healthy systems knowledge • Other skills- Facilitation skills, Advocacy, Innovation, R&D and design thinking

Fig 3: RAPS 2 workshop outcomes



Skill lab visits

SKILLS LAB

Rongkhon

WEST GARO HILLS

TURA, MEGHALAYA

Objectives of skill lab visits

01

Observe the existing training infrastructure, training tools and modules at the skill labs

02

Meet staff and have a formal discussion on all the relevant training issues, to have an in-depth understanding of the planning process, methodologies used and the training evaluation methods adopted.

03

Collaboratively identify and acknowledge the existing needs for strengthening the current training infrastructure, planning and scheduling, training content, methodologies and training evaluation processes

04

Assess the existing status of human resources for training and identify the needs for further strengthening.

Training Infrastructure

Both the skill labs have all the necessary infrastructure. The following needs were identified during observation and discussion

- A big site–signage and few small direction signages to help locate the skill labs
- Projector, laptop and white screen at Tura
- Electricity back up/generator at Tura
- Internet connectivity/Broadband /Wi-Fi connection
- Exclusive accommodation facilities for trainees in their premises

Manikins, equipment and modules

All Basic Skill Lab Training manikins and equipment are present, in both, Tura and Shillong the following can be added:

- New design automated Birth Simulator
- Mama-U and Sister-U for IUCD insertion practice
- Female Pelvis (in Tura Skill Lab)
- Functional Phototherapy unit

Training Plan

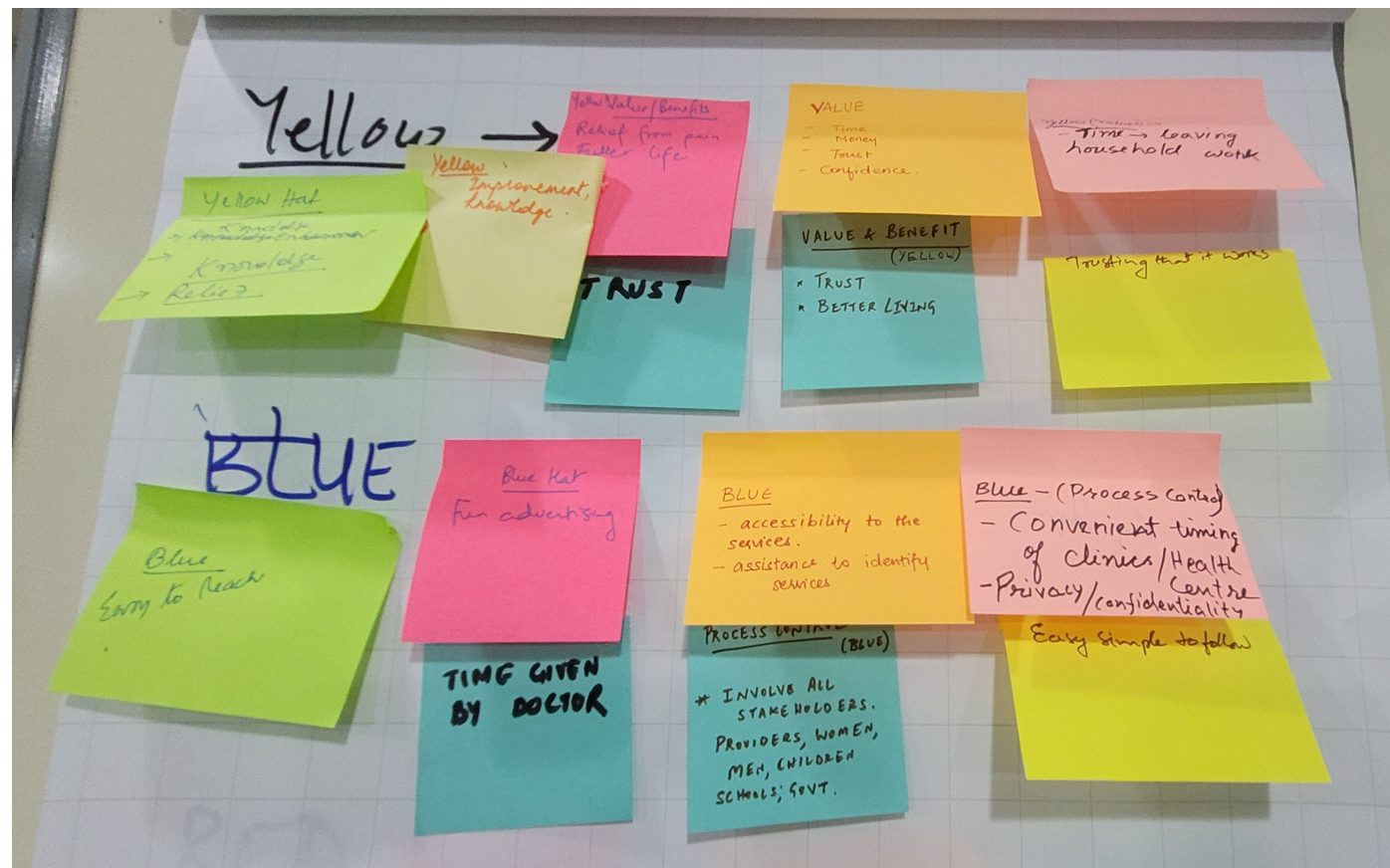
- An annual participative training needs assessment and planning exercise may yield operative feasibility and adherence.
- Monthly training calendars can be made and adhered to individually by each skill lab
- Small library/repository of relevant National/State level guidelines and training modules

Training Mode/Methods

- In-person trainings is preferred compared to virtual trainings
- Workshop/panel discussions to be used more often than didactic lectures
- Need for hands-on practice or demonstration in attached hospitals

Training Evaluation

- After each TOT, the skill labs should receive detailed reports on cascading trainings from facility level





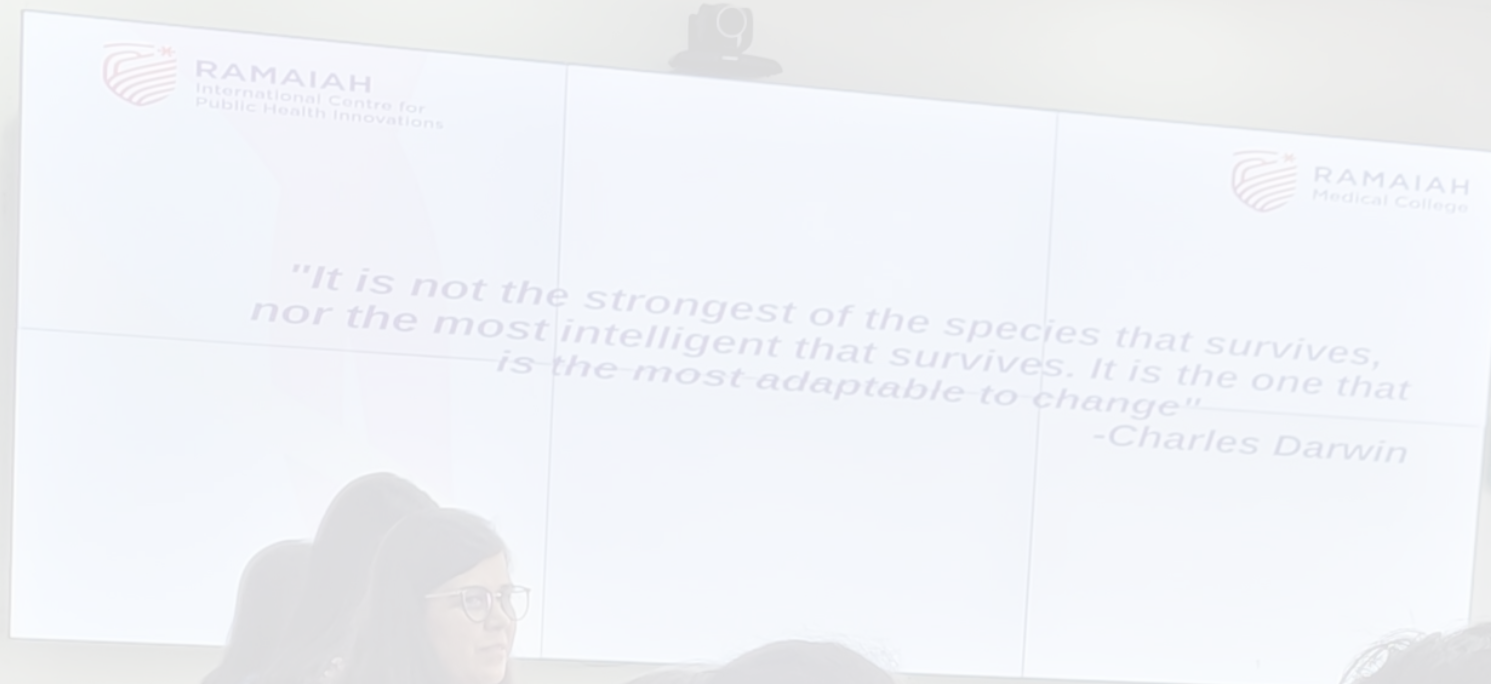
State level training

Workshop on immunization, measles and rubella

**Place: DMH office, Khliehriat, East
Jaintia Hills**

**Participants: MOs and
Supervisors (19)**

- The trainers adhered to timeline and agenda.
- Trainers covered technical areas very well using video clips and case studies.
- Both trainers and trainees had moderate level of energy.
- Some trainees were not fully engaged.
- Trainees asked questions though sporadically.
- Trainers were open to new teaching methods and delivery mechanisms.
- Trainees suggested last time changes in training schedule should not be done.
- For quality control purposes, co-trainers facilitate cascading of trainings.
- Few methodical observations:
 - The training session was fully didactic in nature.
 - Having learning objectives at the start of the session will be helpful.
 - Reflections by trainees will enhance active learning.
 - An evaluation of the training via pre and post tests or other methods shall be valuable.
 - Trainers may benefit from encouraging trainees for active participation.



TNA presentation

A multistakeholder meeting for dissemination of TNA topline findings

As part of the TNA presentation on 19th April, 2023, we asked 25 participants attending the session, the following questions. Their consolidated responses are listed in the forthcoming pages:

Q1: What are the priorities for training content design?

Content design should focus on:

- Interactive visuals and in local language
- Context specific case vignettes
- Hands-on training
- Cover skills like data analysis, report writing, leadership, management, communication & counseling.
- Cadre-wise needs of healthcare providers, such that it facilitates cross-learning
- All these skills should be imparted during the induction stage.

Q2: What are the urgent & context specific ecosystem challenges to be addressed?

- Lack of motivation in trainers & trainees.
- Inadequate number of trainers
- Less number of training centres, inappropriate infrastructure, & IT facilities.
- Unavailability of cadre specific need-based training via online & offline mode.
- Demand & supply of training

Q3: How to ensure the application of training into practice?

- Hands-on training
- Review, monitoring & follow up
- Feedback & supportive supervision
- Assigning mentors to mentees/trainees
- Credit point systems

Q4: How to address the challenges related to scheduling and training calendar?

- Systematic training calendar
- A dashboard of trainings (hybrid mode)
- Flexibility for participants
- Interdisciplinary consultation and planning with stakeholders.
- Increase TOT cadre

Q5: How to enhance motivation of trainers & trainees?

- Incentivization/Awards/credit hours
- Quality & impact of content
- Sufficient time before planned trainings
- Competition /class activities
- Training during off-clinic hours
- Critical feedback
- Chance to innovate & clear doubts
- Refresher training

Q6: What are the best training & learning methods?

- Interactive, no classroom format, hands-on, audio-visual aids
- Train the trainers on:
 - Adult learning methods
 - Simulation trainings
 - Emphasis on Soft skills training
 - Inter-professional cross learning
 - Blended model: induction online-offline course session

Competency map

The Venn diagram represents the amalgamation of different sources of information to arrive at an exhaustive list of competencies (listed on the next page).



Image 3: Mapping of T-M skills and competencies

Mapped skills and competencies (emerging from multiple data sources)

Stakeholder interviews+Literature review+Document review+Proposed list	Stakeholder insights+ proposed list	Document review +Literature review+ proposed list	Proposed but not emerging from the documents
<ul style="list-style-type: none"> • Program management • Leadership styles • Patient/community centric care • Quality consciousness • Managerial communication* • Crisis communication • Supportive supervision • Strategic thinking • Self-directed learning 	<ul style="list-style-type: none"> • Basic IT skills • Documentation (report writing) • Data management • Problem solving • Emotional intelligence (stress management) • Emergency care response • Community Engagement • Foundational literacies <ul style="list-style-type: none"> ○ Health literacy ○ Financial literacy ○ Scientific literacy ○ Cultural literacy 	<ul style="list-style-type: none"> • Interpersonal relations • Teamwork • Data-driven decision making • Basic epidemiology (Outbreak management) • Inventory management • Stakeholder management • Self-reflection • Public Health Surveillance • Change Management 	<ul style="list-style-type: none"> • Creative thinking • Collaboration • Systems thinking

*Managerial communication includes team communication and collaboration, inter and intrapersonal collaboration, workplace collaboration and leadership communication

Upon further exploration, team RICPHI arrived at six functional themes for training curriculum development:

<p>Social and Emotional Competencies</p> <ul style="list-style-type: none"> • Communication • Emotional Intelligence 	<p>Cognitive and meta-cognitive competencies</p> <ul style="list-style-type: none"> • Health literacy • Financial literacy • Scientific literacy • Cultural literacy 	<p>Technology competencies</p> <ul style="list-style-type: none"> • Public Health Surveillance • Data driven decision making • Computer literacy 	<p>Project Management competencies</p> <ul style="list-style-type: none"> • Change Management • Risk management • Resource management • Quality management 	<p>Leadership competencies</p> <ul style="list-style-type: none"> • Stewardship • Stakeholder engagement • Critical thinking • Creativity and problem solving • Collaboration 	<p>Teaching Learning competencies</p> <ul style="list-style-type: none"> • Self-directed lifelong learning • Adult training skills
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Table 4: Proposed list of competencies

- Communication: crisis communication, cross-cultural communication, persuasive communication
- Computer literacy: basics of hardware, software and internet
- Change management : building adaptability and resiliency
- Risk management: conflict resolution, navigating project complexity
- Resource management: supply chain, HR and time management
- Quality management: focus on values, quality consciousness

The following pages highlight some key opportunities that can be leveraged appropriately for resolving/addressing the challenges stated earlier.

Provision from program/policy guidelines

- Mandate from national and state health policies along with the MHSSP project
- Support from state leadership
- Lean management principles advocated by operational guidelines
- Program guidelines outlining skill mix needed for implementation
- Integration of TM training with trainings proposed in PIP (2023-24)
- Competitive environment through state-level competitions

Infrastructure support

- **Upcoming district training units**
- **Availability of digital infrastructure to enable data-driven decisions (MOTHER app, DVDMS, and HRMIS)**

Stakeholder needs

- **Demand from MOs, NS, and Administrators for TM training**
- **Capacity building program as master trainers**
- **Community engagement through the Village Health Council program**

Way forward

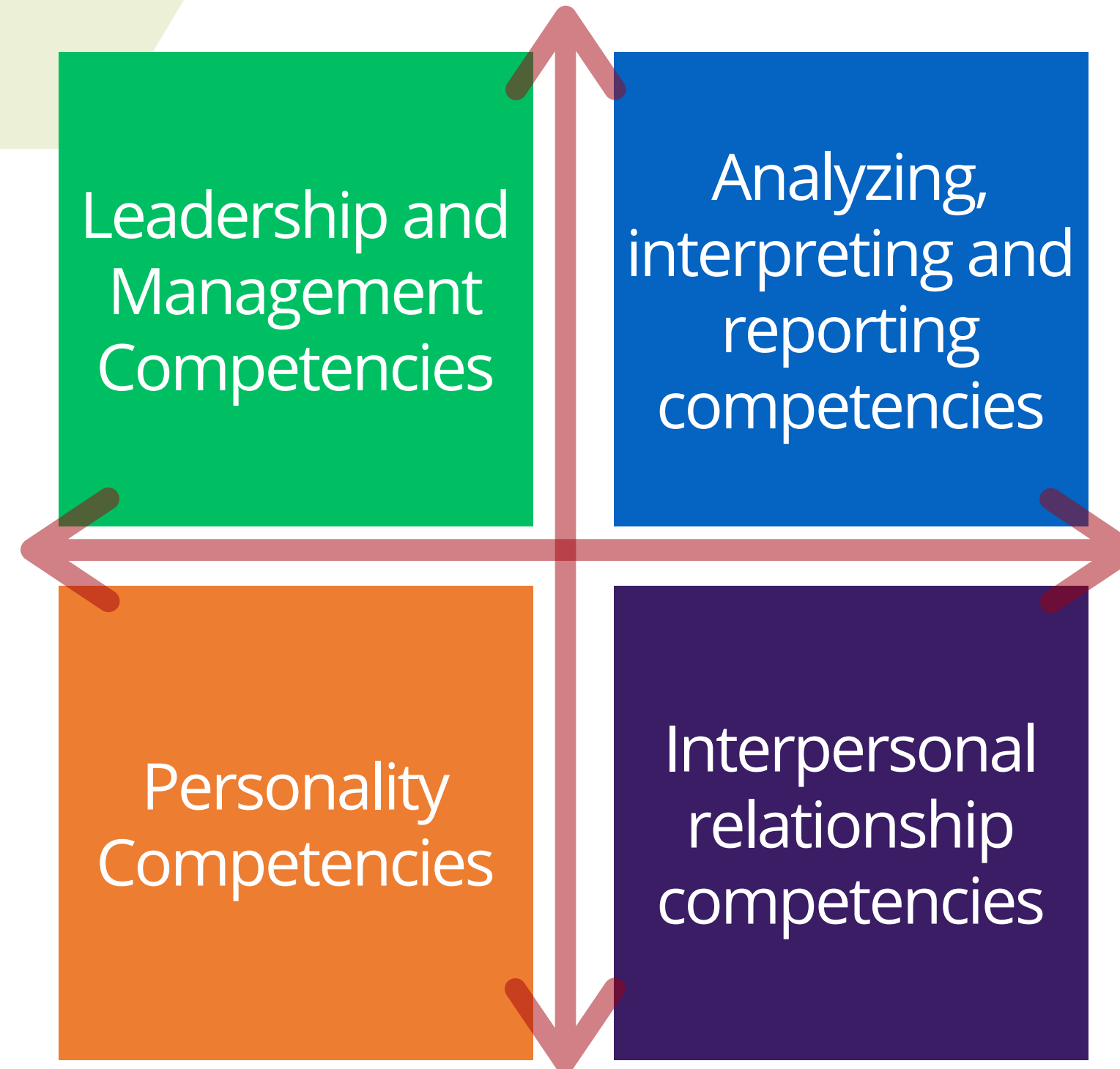
- How to plan these trainings?
 - Strengthening the capability of RHFWTC and the State Training Centre, NHM
 - Revisiting the process of designing the training calendar with inputs from all the stakeholders
- What should be the content of the trainings?
 - Proposed set of priority competencies mentioned earlier; their learning objectives (knowledge, skills and abilities) and customized curriculum for training delivery including evaluation
- How should these skills be delivered?
 - Using a hybrid mode including the use of adult learning principles, for both, offline and online training, with emphasis on in-person hands-on training
- At what level should the trainings be initiated?
 - Top-down approach starting from DMHOs to MOs and SNs
 - Empowering RHFWTC, STC-NHM and district training centres to cover all cadres

Additional slides

- Healthcare providers, in addition to clinical skills, need to develop skills to manage resources and achieve better organizational performance
- The demarcation between clinicians and managers in the health system is rapidly blurring in the post-pandemic scenario
- The health system, thus, needs to promote a managerial culture among healthcare professionals, so that they can be ready to make decisions in both clinical and managerial fields
- The on-site mentorship model implemented in Rwanda has improved maternal health outcomes, however, it focused on clinical care alone.
- A leadership development program was designed to impart leadership skills and interpersonal communication skills to healthcare providers at a tertiary care hospital in Ghana.
 - Participants during the pilot program were able to demonstrate significant improvement in decision making skills and communication skills
- **Aini Q. Management skill and leadership: a case study from hospital managers of charity business in health. J Soc Sci Res 2018; 4: 478–482**
- **Kippist L and Fitzgerald A. Organisational professional conflict and hybrid clinician managers: the effects of dual roles in Australian health care organisations. J Health Organ Manag 2009; 23: 642–655**
- **Noordegraaf M. Risky business: how professionals and professional fields (must) deal with organizational issues. Organ Stud 2011; 32: 1349–1371**
- **Pfeiffer, E., Owen, M., Pettitt-Schieber, C. et al. Building health system capacity to improve maternal and newborn care: a pilot leadership program for frontline staff at a tertiary hospital in Ghana. BMC Med Educ 19, 52 (2019). <https://doi.org/10.1186/s12909-019-1463-8>**

T-M Skills- Emerging themes from systematic review

- Finance
 - Team Management
 - People Supervision
 - Knowledge Management
 - Change Management
 - Risk Management
 - Conflict Management
 - Information Management
 - Policy Development
-
- Ethical Reasoning
 - Critical Thinking
 - Problem Solving
 - Decision Making
 - Public Health Awareness
 - Creative Thinking
 - Individual Updating



- Basic Analysis
 - Problem Identification
 - Data Interpretation
 - Testing solutions, new ideas
 - Post testing follow up, reviewing
-
- Empathy
 - Social Participation
 - Negotiation
 - Communication
 - Teamwork-interdisciplinary
 - Networking

Image 4: Emerging themes of T-M skills

Global Healthcare Management Competency Directory

- Relationship Management
- Communication Skills & Engagement
- Facilitation and Negotiation
- Health Systems and Organizations
- Health Workforce
- Person-Centered Health
- Public Health
- Leadership Skills and Behavior
- Leading Change
- Engaging Culture and Environment
- Driving Innovation

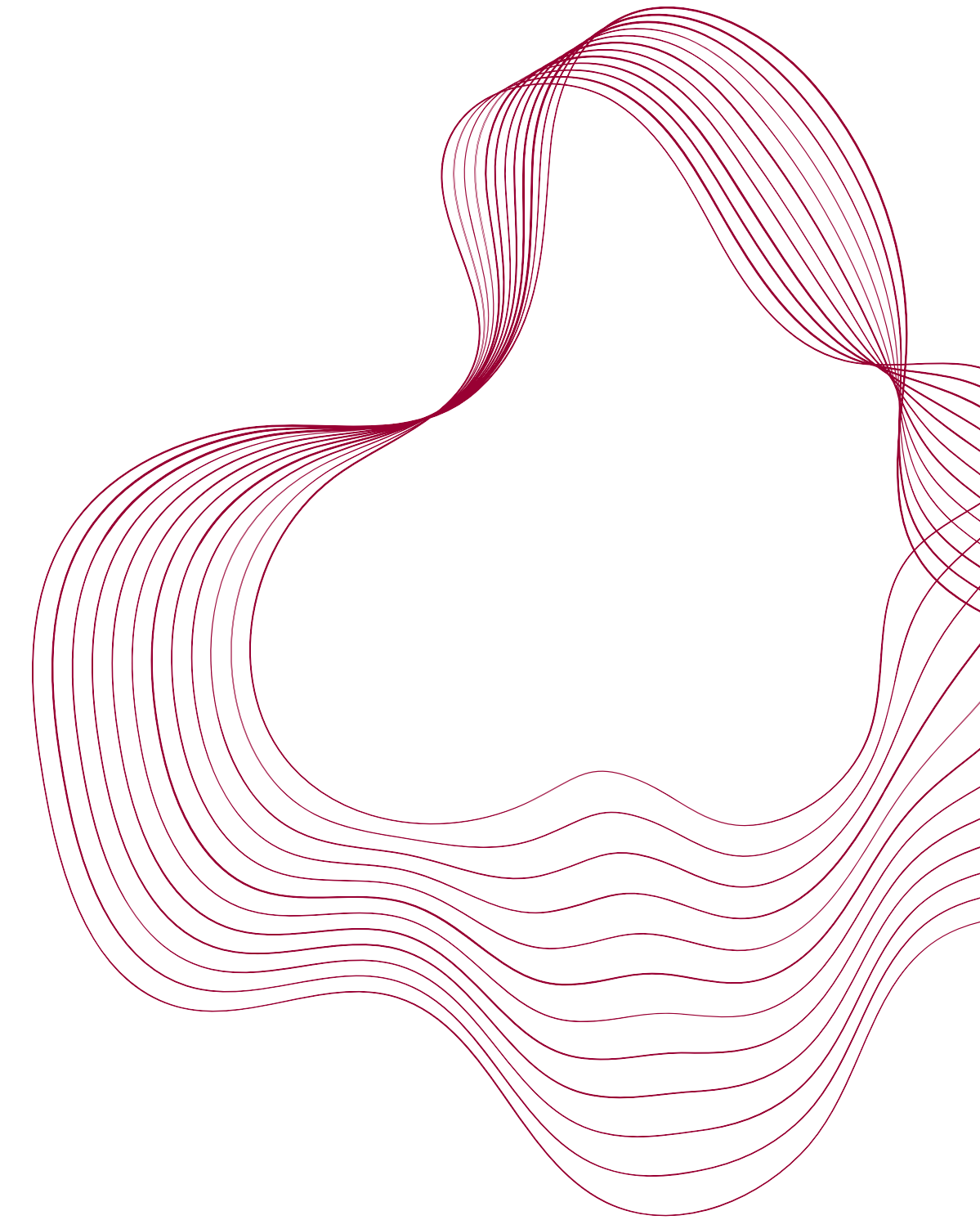


- Personal and Professional Accountability
- Professional Development and Lifelong Learning
- Contributions to the Profession
- Self-Awareness
- Ethical Conduct and Social Consciousness
- General Management
- Laws and Regulations
- Financial Management
- Human Resource Management
- Organizational Dynamics and Governance
- Strategic Planning and Marketing
- Information Management
- Risk Management
- Quality Improvement
- Systems Thinking
- Supply Chain Management

Image 5: Leadership Competency Directory

The Project Management Book of Knowledge (PM-BOK) seventh edition talks about the new age project management principles as mentioned below:

- Be a diligent, respectful, and caring steward
- Create a collaborative project team environment
- Effectively engage with stakeholders
- Focus on value
- Recognize, evaluate, and respond to system interactions
- Demonstrate leadership behaviors
- Tailor based on context
- Build quality into processes and deliverables
- Navigate complexity
- Optimize risk responses
- Embrace adaptability and resiliency
- Enable change to achieve the envisioned future state



The image represents the four core competencies of complex thinking as per Education 4.0

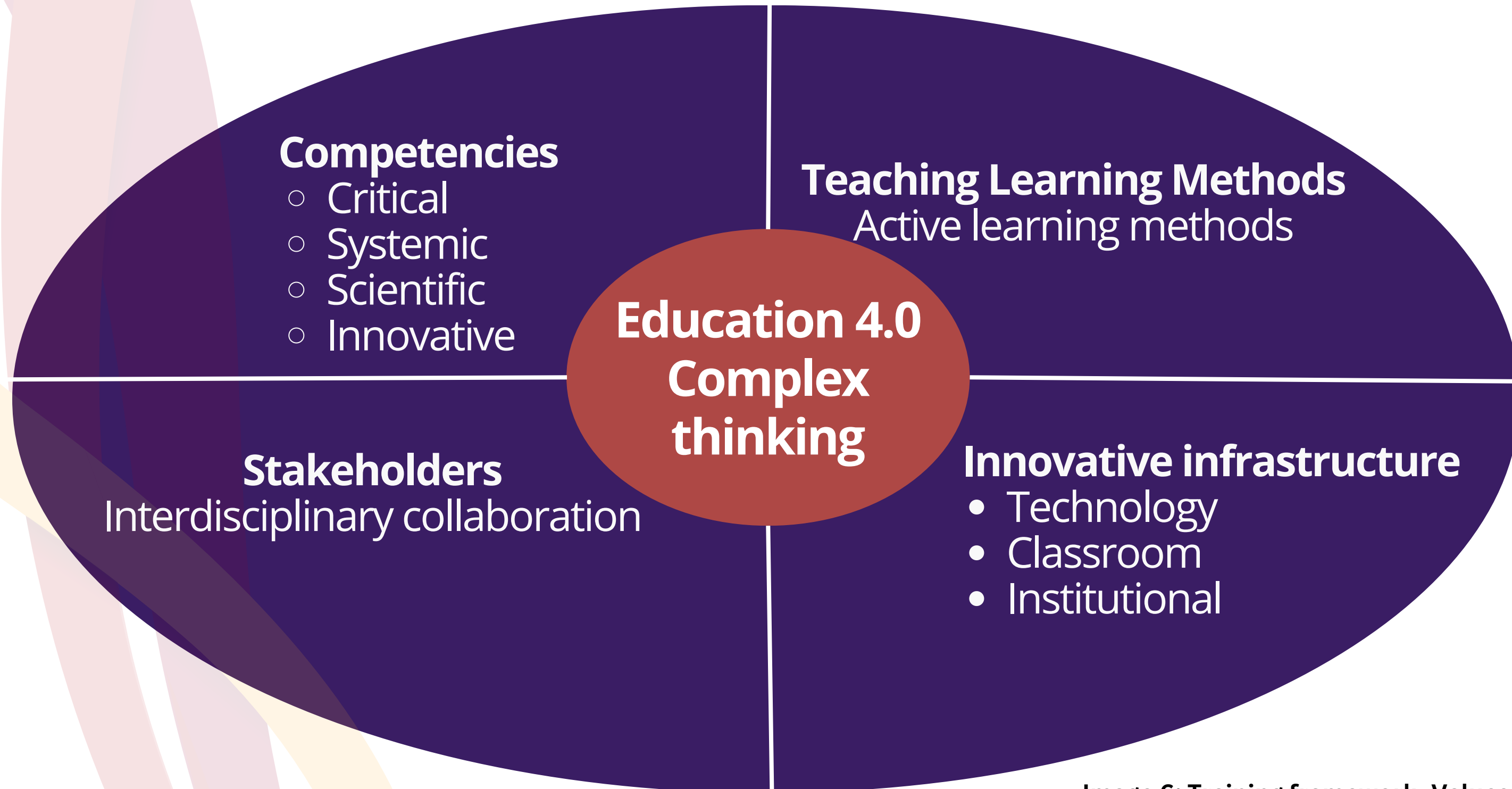


Image 6: Training framework- Values vs. Processes

21st Century Skills

The World Economic Forum has identified 16 crucial proficiencies for education in the 21st century which is shown in the image below:

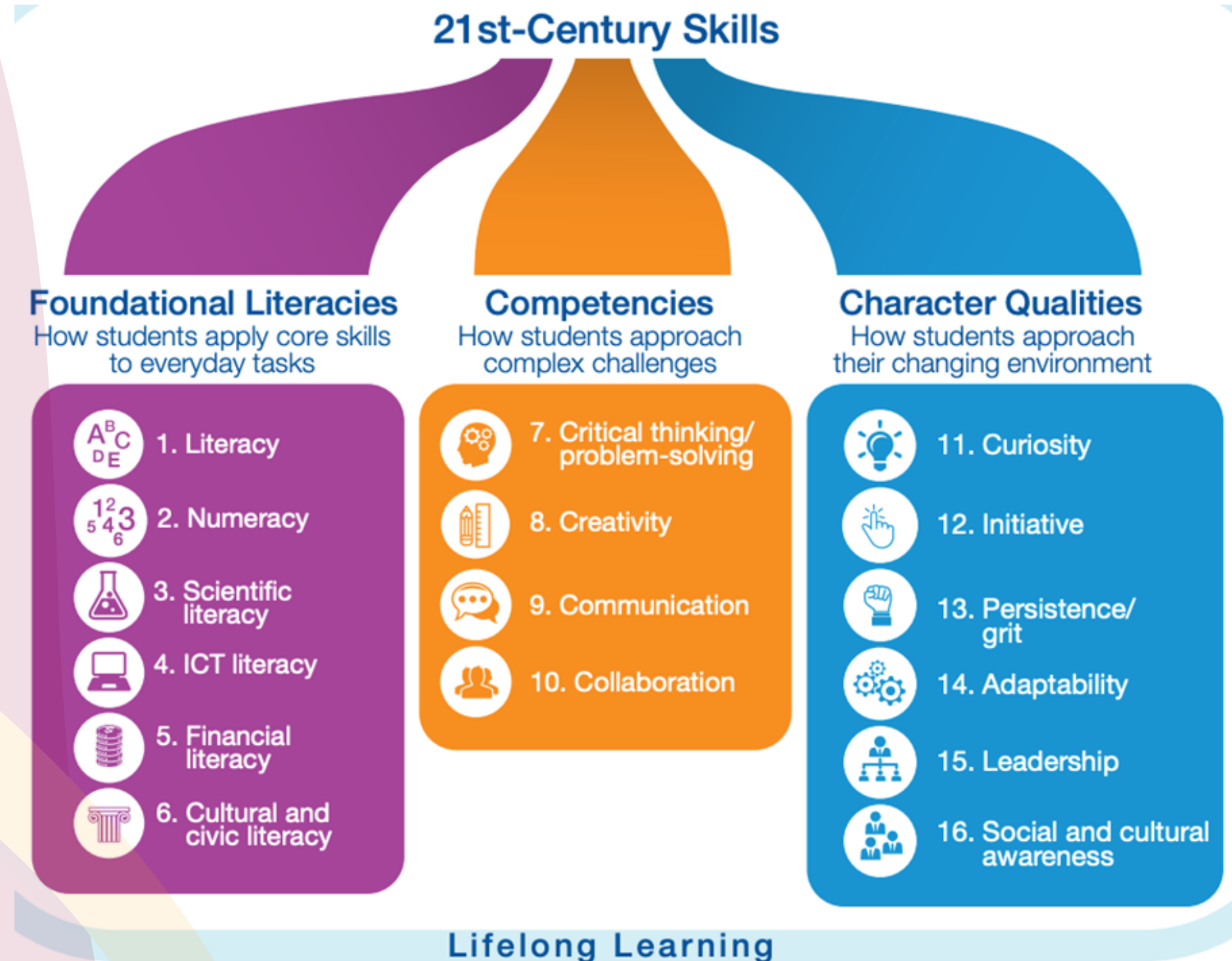


Image 7: 21st century skills framework

World Economic Forum (New Vision for Education: Unlocking the Potential of Technology), 2015 <https://www.weforum.org/agenda/2016/03/21st-century-skills-future-jobs-students/>

International Labour Organization (ILO) framework

A latest comprehensive model on the 21st century skills by the ILO Global Framework on core skills for life and work has been represented below. This framework is easily adaptable and adaptable to any given national context.

"There is an increasing need for cognitive skills, a readily adaptable workforce, which coupled with the growing complexity of job tasks will increase the demand for workers with strong core skills and motivation to learn and adapt throughout their professional careers."

-Guy Ryder (ILO Director-General)

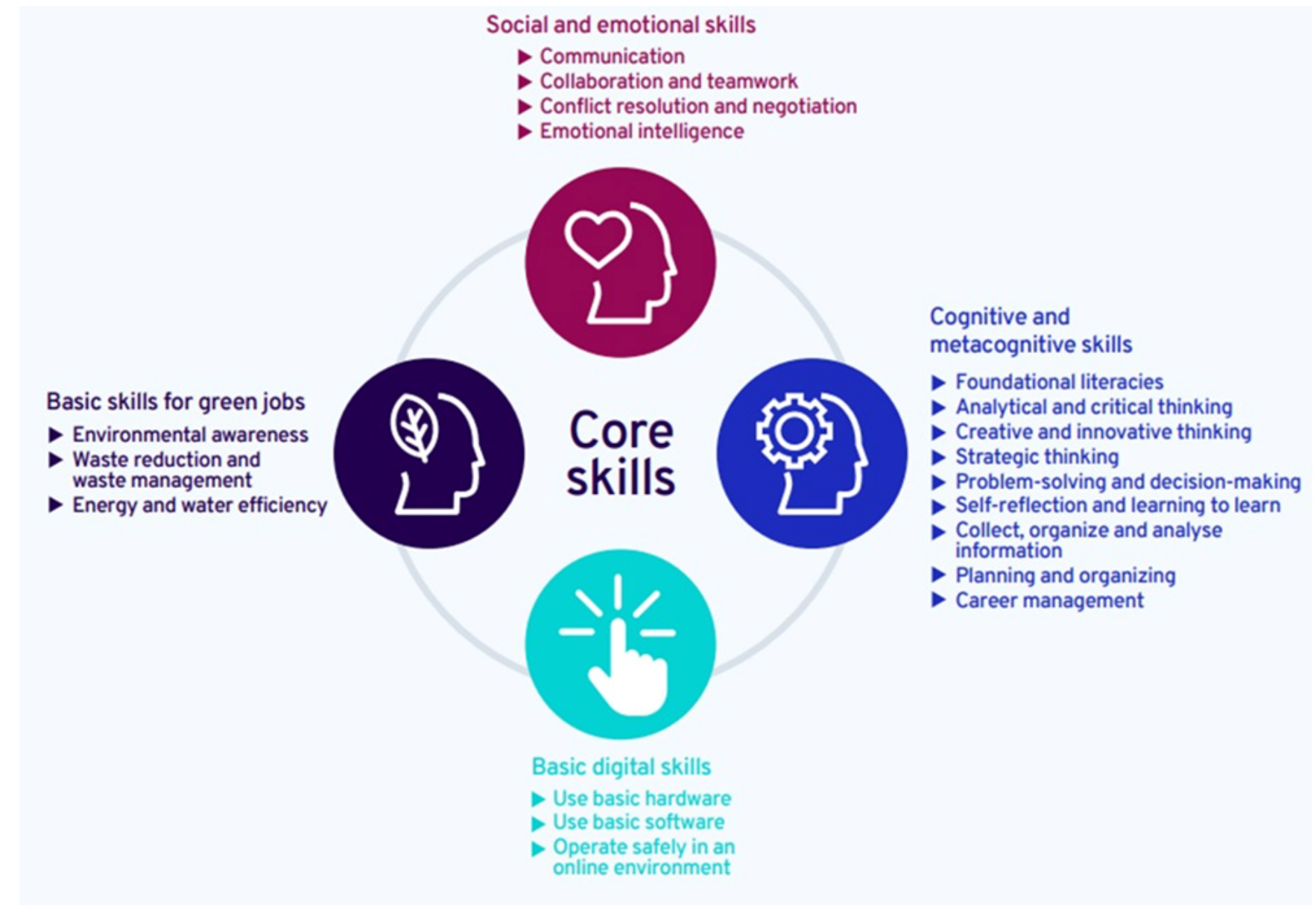


Image 8: ILO framework

The Dakshata guidelines highlighted the following:

- Outlined four (4) major objectives of the program and strategies for implementation of each objective
- Recommended appointment of a dedicated resource person at district level for techno-managerial (TM) support for smooth implementation
- Guidelines assume that the program managers have requisite TM skills for implementation
- Techno-Managerial tools suggested were:
 - Resource needs analysis
 - Facility-specific action matrices
 - Implementation of availability action matrices

DAKSH skills lab for RMNCH+A services

The DAKSH skill lab report states that:

- It is the responsibility of the District Nodal Officer (DNO) to ensure that all support is provided to trainers
- It emphasized on imparting clinical skills to trainees
- TM skills were included in the skill sets of training

Some findings from the LaQshya guidelines are as below:

- Quality circles, informal groups of staff in each department to improve the QOC, were proposed
- Programmatic targets were defined. However the M & E framework for program monitoring is missing
- Quality tools such as Plan Do Check Act (PDCA), Root Cause Analysis, Run Charts, Pareto chart and Mistake Proofing were suggested for monitoring
- Rapid Improvement Events, in a timeline of six cycles of two months, were proposed

The SUMAN guidelines suggest that:

- Gap analysis was proposed for facilities, but skills and tools needed to carry out the gap analysis were not elaborated
- List of indicators were suggested for monitoring and supervision, however the data elements of indicators, interpretation, and application were missing in the guidelines
- Program managers need to have skills such as stakeholder management skills, team building skills and people management skills for program implementation

The 15th Common Review Mission report recommended:

- Strengthening of monitoring and supervision skills at the district and block level
- Refresher training to improve the competency of staff in clinical as well as soft skills
- District-level and staff below may be trained on basic principles of inventory management to ensure hassle-free supply of drugs, prevent stockouts
- Using Drugs and Vaccine Distribution Management System (DVDMS) for supply chain and inventory management

The CPHC operational guidelines highlight that:

- Mid Level Health Providers (MLHPs) were proposed to deliver public health and primary health care services, however the competencies and training curriculum were unclear
- Some skills suggested for Medical Officers and Staff nurses:
 - Skills for training and supportive supervision of field functionaries
 - Skills for management of public health programs
 - Skills to use population based analytics for capacity building and dialogues with primary care teams to improve health outcomes

Ayushman Bharat. Comprehensive Primary Healthcare through Health & Wellness centres. Operational guidelines. 2018. NHSRC
https://nhm.gov.in/New_Updates_2018/NHM_Components/Health_System_Stregthening/Comprehensive_primary_health_care/letter/Operational_Guidelines_For_CPHC.pdf

Operational Guidelines for Implementing Early Child Care & Development (ECD) in Public Health System. March 2018 . Child Health Division Ministry of Health and Family Welfare Government of <http://nirdpr.org.in/crru/docs/health/ECD%20Operational%20Guidelines%20GOI.pdf>

Facilities visited

Districts	Blocks	Facilities/Offices	Districts	Blocks	Facilities/Offices
East Khasi Hills	Shillong	• DMHO Office	South Garo Hills	Chokpot	• Silkigere PHC
		• Ganesh Das Hospital		Baghmara	• Baghmara Civil Hospital
	Mawphlang	• Mawphlang CHC	West Garo Hills	Tura	• DMHO Office & Civil hospital
	Mawsynram	• Mawsynram CHC			• Tura Skills lab
	Pynursla	• Pynursla CHC		Selsella	• Selsella CHC
• Mawkliaw PHC		Tikrikilla	• Tikrikilla PHC		
West Khasi Hills	Mairang	• Mairang CHC • Nongthliew PHC	West Jaintia Hills	Jowai	• DMHO Office & Civil hospital
Ri Bhoi	Nongpoh	• DMHO Office & Civil hospital		Thadlaskein	• Ummulong CHC
		• Marngar PHC		Amlarem	• Nongtalang CHC
East Garo Hills	Rongjeng	• Rongjeng CHC			• Jarain PHC

Table 5: District wise facilities visited

Stakeholders at facilities

Districts	Blocks	Facilities/Offices	Stakeholders interacted with
East Khasi Hills	Shillong	• DMHO Office	• DMHO, DPM-NHM, District data manager
		• Ganesh Das Hospital	• Medical Superintendent, Additional MS, Principal Nursing college, Specialist Hospital administration
	Mawphlang	• Mawphlang CHC	• MO in-charge, MO
	Mawsynram	• Mawsynram CHC	• MO in-charge, BPM, Health supervisor
	Pynursla	• Pynursla CHC	• MO in-charge, NCD staff nurse, public health nurse
• Mawkliaw PHC		• MO, staff nurse	
West Khasi Hills	Mairang	• Mairang CHC • Nongthliaw PHC	• MO, staff nurse
Ri Bhoi	Nongpoh	• DMHO Office & Civil hospital	• DMHO, Addnl DMHO, Nodal Officer, Medical Superintendent, Chief Matron
		• Marngar PHC	• Staff nurse and Umsawn-nongkharai sub-centre ANM
East Garo Hills	Rongjeng	• Rongjeng CHC	• Medical Officer, BPM

Table 6: List of stakeholders interacted with

Districts	Blocks	Facilities/Offices	Stakeholders interacted with
South Garo Hills	Chokpot	<ul style="list-style-type: none"> Silkigere PHC 	<ul style="list-style-type: none"> MO in-charge, Staff Nurse, Pharmacist
	Baghmara	<ul style="list-style-type: none"> Baghmara Civil Hospital 	<ul style="list-style-type: none"> Medical Superintendent, Senior Medical Health Officer, Nursing Superintendent
West Garo Hills	Tura	<ul style="list-style-type: none"> DMHO Office & Civil hospital 	<ul style="list-style-type: none"> DMHO, Senior MO, MS, Senior M&HO, Hosp admin, Accounts-in-charge
		<ul style="list-style-type: none"> Tura Skills lab 	<ul style="list-style-type: none"> Training coordinator, 3 skills lab trainers
	Selsella	<ul style="list-style-type: none"> Selsella CHC 	<ul style="list-style-type: none"> MO in-charge, 2 medical officers
	Tikrikilla	<ul style="list-style-type: none"> Tikrikilla PHC 	<ul style="list-style-type: none"> MO in-charge, MO, health educator, staff nurse, pharmacist
West Jaintia Hills	Jowai	<ul style="list-style-type: none"> DMHO Office & Civil hospital 	<ul style="list-style-type: none"> DMHO, District MCH Nodal Officer, District, Surveillance Officer, DPM, Medical Superintendent, Chief Matron
	Thadlaskein	<ul style="list-style-type: none"> Ummulong CHC 	<ul style="list-style-type: none"> Medical Officer, Health educator
	Amlarem	<ul style="list-style-type: none"> Nongtalang CHC 	<ul style="list-style-type: none"> MO, AYUSH NO, Health educator, PHN, pharmacist
		<ul style="list-style-type: none"> Jarain PHC 	<ul style="list-style-type: none"> Medical Officer

Table 6: List of stakeholders interacted with (Contd.)

The two boxes represent suggestive topics around clinical and T-M skills as recommended by staff at the skill labs in Tura and Shillong.

Clinical Training

- Breach Delivery Simulation
- IUCD insertion
- Adult BLS
- Neonatal Jaundice
- Antibiotic stewardship

T-M Training

- Inter-personal communication
- Training and facilitation skills
- Basic data reading and interpretation skills etc.

The first RAPS workshop organized on 2nd February 2023, saw a heterogenous group of 20 participants including the following:

Executive Member, Grassroot and National Health Mission, Meghalaya	Professor and HOD, OB & GYN, Nazareth Hospital
Consultant, RBSK and CPHC, NHM, Meghalaya	Programme Officer, RKSK
Consultant, IPE Global	Principal, RHFWTC
ENT Specialist, Ganesh Das Hospital, Shillong	Project Consultant, HRH and Finance
Research Associate, MHSSP	Consultant, OB & GYN, NHM
State Consultant, RMNCH+A, UNICEF	Jt. Director, MCH &FW, NHM

Table 7: Participants' profiles from the first RAPS workshop

The second RAPS workshop organized on February 23, 2023, saw a heterogenous group of 10 participants including the following:

IT Expert, PMA, MHSSP	Medical and Health Officer, Ganesh Das Hospital
Health Economist	Training Consultant, MHSSP
Principal, Nursing School	Principal, RHFWTC
Principal Nursing Officer	Deputy Director, DHSMI
Nursing Superintendent	Medical Lecturer cum Demonstrator, RHFWTC

Table 8: Participants' profiles from the second RAPS workshop

References consulted for proposed competency list

While exhaustive amount of references have been consulted in mapping the potential competencies necessary to be included in the TM Training Curriculum, the following references have been specially referred while proposing the list of competencies in a previous section.

Michielsen, L., Bischoff, E.W., Schermer, T. et al. Primary healthcare competencies needed in the management of person-centred integrated care for chronic illness and multimorbidity: Results of a scoping review. BMC Prim. Care 24, 98 (2023). Adapted from Ramírez-Montoya, M.S et al <https://doi.org/10.3390/joitmc8010004>

•**Adapted from Ramírez-Montoya, M.S et al <https://doi.org/10.3390/joitmc8010004>**

•**Frank JR, Snell LS, Cate OT, Holmboe ES, Carraccio C, Swing SR, Harris P, Glasgow NJ, Campbell C, Dath D, Harden RM, Iobst W, Long DM, Mungroo R, Richardson DL, Sherbino J, Silver I, Taber S, Talbot M, Harris KA. Competency-based medical education: theory to practice. Med Teach. 2010;32(8):638 - 45. doi: 10.3109/0142159X.2010.501190. PMID: 20662574.**

•**Global framework on core skills for life and work in the 21st century. International Labour Organisation, 2021 [cited 2023 May 9]. Available from: http://www.ilo.org/skills/pubs/WCMS_813222/lang-en/index.htm**

•**Chamorro-Premuzic T, Yearsley A. The Downsides of Being Very Emotionally Intelligent. Harvard Business Review [Internet]. 2017 Jan 12 [cited 2023 May 9]; Available from: <https://hbr.org/2017/01/the-downsides-of-being-very-emotionally-intelligent>**

•**Adapting and Aligning Public Health Strategic Skills | PHERN [Internet]. [cited 2023 May 9]. Available from: Adapted from Ramírez-Montoya, M.S et al <https://doi.org/10.3390/joitmc8010004>**

•**The standard for project management and a guide to the project management body of knowledge (PMBOK guide). ©2021 Project Management Institute, USA Inc. All rights reserved. Identifiers: ISBN 9781628256659 (epub).**

Thank you!

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