Technical assistance delivery framework for health supply chain strengthening

A joint partner effort to improve access to essential vaccines, medicines and health technologies
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# Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ASCM</td>
<td>Association for Supply Chain Management</td>
</tr>
<tr>
<td>CESAG</td>
<td>Centre Africain d’Etudes Supérieures en Gestion</td>
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<tr>
<td>COVID</td>
<td>Coronavirus disease</td>
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<tr>
<td>EAPRO</td>
<td>East Asia and the Pacific Regional Office (UNICEF)</td>
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<td>EPI</td>
<td>Expanded Programme on Immunization</td>
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<tr>
<td>EURO</td>
<td>WHO Regional Office for Europe</td>
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<tr>
<td>ESARO</td>
<td>Eastern and Southern Africa Regional Office (UNICEF)</td>
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<tr>
<td>EVM</td>
<td>Effective Vaccine Management</td>
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<tr>
<td>HR</td>
<td>Human resources</td>
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<tr>
<td>IAPHL</td>
<td>International Association of Public Health Logisticians</td>
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<tr>
<td>ICT</td>
<td>Information and communications technologies</td>
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<td>ISC</td>
<td>Immunization supply chains</td>
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<td>JSI</td>
<td>John Snow Inc.</td>
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<td>LACRO</td>
<td>Latin America and Caribbean Regional Office (UNICEF)</td>
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<td>MENARO</td>
<td>Middle East and North Africa Regional Office (UNICEF)</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
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<td>PD</td>
<td>Programme Division</td>
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<tr>
<td>PEF</td>
<td>Partner Engagement Framework</td>
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<td>PtD</td>
<td>People that Deliver</td>
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<tr>
<td>ROSA</td>
<td>Regional Office for South Asia (UNICEF)</td>
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<tr>
<td>SC</td>
<td>Supply chain</td>
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<tr>
<td>SD</td>
<td>Supply Division</td>
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<td>TA</td>
<td>Technical assistance</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>WCARO</td>
<td>West and Central Africa Regional Office (UNICEF)</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Executive summary

This options paper presents a framework and new approaches for a country-owned, sustainable model of technical assistance: a model that responds to country needs in the health supply chain and ensures that quality health supplies reach children and communities.
The COVID-19 pandemic, like other emergencies, has unveiled the importance of building resilient supply chains that can respond to emergencies with more agility and flexibility. The substantial global investment in the current landscape of technical assistance (TA) provision is still heavily reliant on external partners, which poses considerable risks to national programme sustainability and donor investments.

This options paper presents a framework, scenario options and an operational structure for moving towards a country-owned, sustainable model of TA that responds to the need to strengthen TA delivery within health supply chain systems, including the workforce, so that programmes with quality health supplies reach children.

The framework is aligned with global approaches agreed by major global partners and takes into consideration country demand for agile, continuous and effective TA to respond to emergencies, address persistent gaps and build long-term resilient and sustainable national supply chain capacity. While the primary focus is on supply chain, the principles of the framework are applicable to other areas of health capacity development needed to strengthen health systems.

The vision for sustainable, country-owned TA encompasses: TA delivery to engage local partners to deliver outputs and maintain a long-term relationship for continuous improvement; TA partners to shape new, competitive, and self-sustainable TA and identify new institutions to provide expertise; and TA monitoring to ensure partner compliance with standards, accountability and measurement of TA impact on programme and system performance.

Regardless of the objectives and methodologies, there are many common elements regarding TA across programmes and supply chain areas. Some of the prevailing gaps include:

- TA is not fit for purpose
- Lack of context-specific TA approaches
- Limited focus on building a knowledge-based TA system
- TA is treated as an appendix to programming

A paradigm shift is needed to drive collective alignment towards a country-owned, sustainable model of TA capable of addressing:

- Dissimilar understandings of capacity development and TA
- Disconnect between global actors and countries
- The complexity of the required skills
- Financing for sustainability

A system strengthening approach to supply chain TA requires planning according to the levels, types and purpose of the capacities that the system needs according to a country’s level of supply chain maturity. This includes addressing the human and institutional dimensions of capacity development, as well as facilitating a collective response where new modalities of transformational collaboration arise. The following are guiding principles based on the findings of the desk review conducted for this paper and the intention to optimize the above global priorities:

- Engage local governments in the planning and delivery of TA to promote ownership.
- Ensure supply chain workforce, at all levels, has equitable access to knowledge.
- Provide TA for capacity development that is fit for purpose.
- Expand individual skills and institutional competencies beyond the current list of supply chain and immunization competencies.
- Evolve TA towards a more collaborative and distributed institutional architecture.
- Ensure that people and practice enablers are as important as skills and competencies.
- Promote innovation in learning and TA delivery to optimize the adoption of supply chain innovation.
A major outcome of the framework is a new focus that outlines a resilient structure to create an ecosystem for leveraging the full range of partners with relevant experience and aligning programme investments through six new transformative approaches. The six transformative TA approaches are key pillars for building the competencies and capabilities of the system to respond to the priority health needs of the population through innovation, productive knowledge and efficiency of work processes (see Figure 1). The call to action is for government and partners to adopt, invest, capacitate and scale up TA improvement solutions using the six new approaches.

**Actions**

The iterative process of defining TA needs, budgeting and implementation in countries requires specific country-driven actions to drive accountability, value for money and sustainability comprising:

- Targeted investment in building the capabilities of local partners for TA planning and delivery
- Contextualized knowledge-based TA system linked to local HR systems.
- Collaborative network of local partners as TA implementers.
- An interdisciplinary and multi-professional community of best practice comprising network of local organizations for learning and innovation.
- Focus on sub-national capacity, gender programming, new technologies and local competency development for TA delivery

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**Figure 1: The six new transformative TA approaches**

- **Country-centred design**
  - TA framework and approaches
  - TA planning
  - TA design
  - Policy improvement

- **Digitalization**
  - Digital technologies
  - Digital learning
  - Digital solutions
  - Digital tools

- **Market shaping**
  - Landscape analysis
  - Certification
  - Database of service providers

- **Maturity measurement**
  - Supply chain assessment
  - Maturity framework
  - Improvement planning
  - Accountability systems

- **Talent transformation & professionalization**
  - Professionalization
  - Competency development
  - Leadership development
  - Talent engagement strategies
  - Human resources planning with sub-national focus

- **Knowledge Labs**
  - Communities of practice
  - Academic collaborations
  - Incubators and accelerators
  - Reverse innovation
  - Industry consultation
The approach presented in this paper aims to institutionalize TA for health supply chain by embedding a system and culture of networked and distributed TA delivery within ministries of health and health programmes, in partnership with public and private organizations.
The COVID-19 pandemic, like other emergencies, has unveiled the importance of building resilient supply chains that can respond to emergencies with more agility and flexibility. However, the magnitude and speed of its spread and the response from countries has provoked an unprecedented disruption to the traditional TA delivery model, making evident the urgency of moving from internationally dependent capacity development TA providers to strong, country-based ones. The substantial global investment in the current landscape of TA provision is still heavily reliant on external partners. This poses considerable risks to national programme sustainability and donor investments.

This options paper is the result of a multi-partner consultation. It presents a framework, scenario options and an operational structure for a country-owned, sustainable model of TA that responds to the need to strengthen local TA provision for the health supply chain workforce to ensure that quality health supplies reach the children who need them.

The approach taken in this paper is aligned with two global approaches agreed by major global partners:

1. The Gavi Alliance 5.0 strategy goals – in particular, the equity and sustainability goals that focus on unreached and under-immunized children and an increased focus on sustainability.

2. The five levers of the Joint President’s Emergency Plan for AIDS Relief, the President’s Malaria Initiative, the Bill & Melinda Gates Foundation, the Gavi Alliance and the Global Fund’s supply chain approach, which are:
   - Sustainable governance
   - Supply chain segmentation
   - Private sector engagement
   - Planning
   - Innovation

The framework also takes into consideration country demand for agile, continuous and effective TA to respond to emergencies, address persistent gaps and build long-term resilient and sustainable national capacity. While the primary focus is on supply chain, the principles of the framework are applicable to other health realms of capacity development.

The approach presented in this paper aims to institutionalize TA by embedding a system and culture of networked and distributed TA, delivered within MOH structures and leveraging the organizational competencies of academic, civil society and private organizations, in collaboration with the MOH. The organizations – referred to as ‘institutions’ – comprise universities, training institutions, corporate academies and non-governmental organizations (NGOs). These TA partners should be established within the legal parameters of country systems, locally managed and resourced with a significant outlook on the local market in partnership with partners.

The vision for sustainable country-owned TA encompasses the following key points:

- TA delivery – Engage local partners, including the private sector, to deliver outputs and maintain long-term relationships for continuous improvement.

- TA partners – Leverage the skills of other organizations in the ecosystem to shape new and competitive and self-sustainable TA markets at the regional and local levels; and identify new institutions that can provide expertise to governments in supply chain assessments, improvement planning and continuous improvement cycles.

- TA monitoring – Leverage development partners to provide certification and quality assurance mechanisms (rather than contracting and funding), with countries remaining in the lead. This ensures partner compliance with standards, accountability and measurement of TA impact on programme and system performance.

Figure 2 summarizes the proposed theory of change. It is designed with the assumption that a sustainable TA architecture to meet the evolving capacity development needs of the supply chain workforce at all levels is urgent, feasible and can be designed and owned by national stakeholders.
The multi-partner consultation focused on proposing a TA framework based on a systematic desk review of technical documents, reports and previous assessments, semi-structured interviews with key informants, examination of existing immunization and non-immunization-related supply chain learning networks, and broader consultations with stakeholders at global, regional and national levels. After agreement on the framework by a technical reference group and additional stakeholders, the framework was presented at a webinar organized by UNICEF on 28 October 2020 – ‘Technical Assistance for Health Supply Chains in the Post-COVID World’.

A subsequent phase is being planned to contribute to global strategy development processes and to support countries that identify the framework as contributing to their demands for agile, continuous and effective TA.

Ultimately, this work expects to contribute to the following outcomes:

- An agreed framework for steering collective alignment towards a country-owned, sustainable model of TA to drive the continuous improvement process.
- Standard core competencies informing expressions of interest, requests for proposals, terms of reference for engagement and selection of local service providers.
- At least one local TA collaborative actively engaged in immunization and health supply chain strengthening activities together with partners in specific geographies.
- A good understanding of the local TA service market and applied context-specific approaches for achieving productive knowledge at national and subnational response levels through a network of local institutions with complementary expertise.
Findings on current technical assistance delivery models

Countries lack a TA delivery architecture to sustainably transfer know-how to individuals and their institutions and a system to curate local knowledge. TA approaches do not foster joint planning, shared accountability and coordinated delivery.
Findings on current technical assistance delivery models

Regardless of the objectives and methodologies, there are many common elements of TA among countries. Some of the prevailing gaps include:

- TA is not fit for purpose. TA does not meet country needs or priorities. Currently, TA does not adequately target subnational workforces with the scale and consistency that will result in sustained capacity development for supply chain systems strengthening.

- TA lacks context-specific approaches. The TA approach is often externally driven with limited participation by local institutions. There is weak co-creation with countries to address relevance, diversification and complexity of TA approaches.

- TA has limited focus on building a knowledge-based system. Countries lack a TA delivery architecture for sustainably transferring know-how to individuals and their institutions, and a system for curating local knowledge. TA approaches do not foster joint planning, shared monitoring and coordinated TA delivery, nor do they systematically address supply chain professionalization, accreditation, career progression and linkages to national human resources (HR) plans and information.

- TA is treated as an appendix to programming. TA is not planned or resourced for long-term sustainability. It is not measured according to programme or system performance, or effectiveness of TA investments.

A paradigm shift is needed to drive collective alignment towards country-owned, sustainable models of TA capable of addressing the following:

- Dissimilar understandings of capacity development and TA. Clear definitions are crucial for a shared understanding and agreement on the planning processes and expected results; and different country contexts also need to be considered.

- Disconnect between global actors and countries. TA has to be country specific and prioritize last-mile and facility levels. It should systematically include gender-equitable access to capacity development in TA planning and implementation.

- The complexity of skills required. Efforts should be leveraged to build the capacity of national counterparts to result in system strengthening, leveraging institutions with national presence, networks, resources and proven expertise to deliver elements of the continuous comprehensive capacity development in supply chain nationally or regionally.

- Financing for sustainability. Funders require better in-country monitoring, stronger government ownership and an increased role of the private sector. Partnerships among TA providers that have been established at global level have weak organizational relationships with national TA institutions. Closer local ties will align TA objectives to national planning processes, including those related to broader health and HR policies. There is a need for clearer and more lucid correlation between the investments and the performance of the TA delivery, outcomes and impact.
Building a model for a knowledge-based technical assistance system

The proposed framework is based on optimizing existing efforts to create a collaborative ‘think and act-tank’ network of organizations and institutions working with the ministry of health that can use their comparative advantages to create a comprehensive supply chain technical assistance delivery system for continuous, sustainable and scalable capacity development.
Building a model for a knowledge-based technical assistance system

The capabilities behind strong supply chain systems aim to ensure that countries are able, with time, to guide investments and decide on the most appropriate innovations to introduce, based on a thorough understanding of their needs, capacities and resources. A systems strengthening approach to supply chain TA requires having to plan linked to the levels, types and purpose of the needed system capacities, according to the country’s level of supply chain maturity. This includes addressing the human and institutional dimensions of capacity development, as well as facilitating a collective response where new modalities of transformational collaboration arise.

The following are guiding principles based on the findings of the desk review and the intention to optimize the above global priorities:

- Engage local governments in the planning and delivery of TA to promote ownership. Country-led responses that are based on local solutions give way to sustainable governance, contextualized knowledge, reverse or trickle-up innovation and ownership over the design of new approaches.

- Ensure supply chain workforce at all levels has equitable access to knowledge. TA systems need to be designed with equity (including with respect to gender) and intercultural perspectives that enable learning opportunities for the supply chain workforce at subnational levels who have little access to training due to underlying contextual factors.

- Provide TA for capacity development that is fit for purpose. This means that TA is programmed and delivered locally and continuously, meets the workforce on the job, and counts on effective rapid response mechanisms and remote/regional/global support as needed.

- Expand individual skills and institutional competencies beyond the current list of supply chain and immunization competencies. The increasing complexity of supply chain demands broader capabilities among the supply chain workforce (e.g., information and communication technologies (ICT) and innovation management, collaborative critical thinking skills and competencies, and change management) for continuous improvement of the system’s capacity, effectiveness and efficacy.

- Evolve TA towards a more collaborative and distributed institutional architecture. TA will be collectively designed and delivered through a network of national institutions with complementary expertise that can provide continuous, relevant, timely and accountable TA at all levels. Ultimately, the effectiveness of TA will be measured by programmatic performance and supply chain system maturity. Private sector engagement in the national knowledge-based network facilitates the transfer of skills for system efficiency and innovation.

- Ensure that people and practice enablers are as important as skills and competencies. The workplace ecosystem and the human need for support, engagement and recognition, need to be taken into consideration. A robust TA system will empower individuals and teams, serve as a platform to advocate for a resourced supply chain system, and support the government for the development of HR policies and HR information systems. National institutions are best poised to offer accredited learning and facilitate a path towards career progression.

- Promote innovation in learning and TA delivery to optimize the adoption of supply chain innovation. Digital technologies are transforming the supply chain and the way that people work. This needs to be accompanied by innovation on TA delivery as a part of a comprehensive approach for capacity development. The created synergies also become a continuous learning process at global level (for funders/partners), national level (for programme staff/MOH and local institutions) and subnational level (for the workforce).
The proposed technical assistance framework: A collaborative, networked and distributed technical assistance ecosystem

A systems approach to drive collective alignment towards a country-owned, sustainable model of TA is built on the premise that individuals and organizations acting in isolation cannot optimize their potential. Collaborative networks serve as instruments for sharing common interests, as well as bringing together diverse groups towards a common goal through the principles of trust, reciprocity, solidarity and cooperation. This is a crucial element when working with countries as partners to reframe what TA can do for capacity development, as opposed to the current top-down, externally-driven model of TA delivery.

The proposed framework is based on optimizing existing efforts to create a collaborative ‘think-tank/act-tank’ network of national institutions that can use their comparative advantages to create a comprehensive TA delivery system (targeted, mid-complexity and advanced levels) for continuous, sustainable and scalable capacity development. This, however, requires a transformational shift from the existing learning processes that tend to place more emphasis on data, information and task-oriented skills, towards collective competencies and results.

The components of this ecosystem are composed of the following three pillars (see Figure 2):

1. Capacity development and TA, because building the supply chain competencies of people and teams requires simplifying processes, avoiding duplication of roles and being supported with relevant, flexible and timely TA delivery.
2. Knowledge management and continuous improvement, because the capacity development process will generate knowledge that needs to be systematized and used to generate supply chain efficiency and catalyse change and innovation for continuous improvement.
3. Human resource systems and advocacy, because the workforce needs to feel acknowledged, supported and empowered, and the sustainability of the collaborative network of training institutions will involve influencing the mindsets of stakeholders – including the supply chain workforce – to overcome the key advocacy challenges that global health networks face, namely problem definition, positioning, coalition building and governance (Shiffman, 2017).

Figure 3: Proposed ecosystem for capacity development: an enabling environment is essential
Capacity development is a combination of a learning architecture (focused on the acquisition of competencies and skills base) with relevant and efficient TA delivery (see Figure 3). Operationalizing it demands an articulation of planning, coordination and management of the technical content and the TA delivery.

This model focuses on how to construct a more efficient TA delivery architecture that is less reliant on individual experts and isolated institutions. Rather, it builds on the collective know-how of institutions to facilitate the process that leads to productive knowledge.

While international TA partners provide valid approaches to capacity development, learning collaboratives driven by national institutions can complement these initiatives by capitalizing on the following key differences:

1. Accreditation and career progression. National institutions have validated accreditation mechanisms that facilitate alignment with national HR plans and make the case for linking training to career progression. Some institutions have sub-regional accreditation (e.g., CESAG accreditation through the Economic Community of West African States) that can open the possibility of consolidating a network to multi-country scale.

2. Sustainability and business for results. Supply chain training provides products of interest to both the public and private sectors. A business for results approach can infuse additional revenue to the collaborative that can support the sustainability of the institutions, the continuity of TA and, with time, help subsidize/lower the cost for training the public sector.

3. Subnational reach and contextualization. Standards and results in supply chain performance are universal, but to be relevant their presentation needs to be specific to context. National institutions have subnational presence and/or reach (e.g., branch offices, campuses) and can not only translate international materials and tools, but adapt them according to cultural differences, gender, local languages and functional literacy.

4. Technological support. Resistance to new technologies by the health workforce is sometimes related to the lack of ICT support. Local institutions...
can supply ICT competencies and services (e.g., ICT and maintenance help desks, training of ICT technicians for field support) to build confidence throughout the supply chain and support innovation (e.g., effective vaccine management (EVM) 2.0 uptake and cold chain equipment commissioning).

5. Trustworthiness and continuity of TA. Trust relationships, not just credibility or reliability, are fundamental to any sustainable learning initiative. Client-centred collaboratives composed of known local entities are strategically placed to provide long-term, quality capacity development, as well as to develop trusting relationships with different stakeholders and decision-makers for continued support.

6. Timeliness and accountability. Performance-based funding demands performance-based TA. The closer the institutions are to the services and its workforce; the better aligned TA planning and delivery will be to effectively respond to need and avert implementation delays.

7. Localized solutions. Nationally-driven TA learning collaboratives could potentially identify priorities that may not have been picked up through globally-driven TA, such as (re)design of systems for environmental sustainability (e.g., local low-tech solutions for storage of vaccines using traditional materials, reimagining transport packaging as a product-service system with zero carbon footprint).
This framework is based on a premise that a mix of institutions, both public and private, with complementary characteristics and competencies at different levels of institutional maturity, can work together to build collective quality supply chain expertise over time.
Traditionally, institutionalized TA has relied on the notion of ‘centres of excellence’. While this is still a valid model, it assumes that a sole institution can provide TA in all aspects of an increasingly complex supply chain. It also assumes that centres of excellence can support large-scale implementation on their own, which is not necessarily the case. In addition, the concept of ‘excellence’ is not inclusive. This means that centres of excellence do not contribute to building the local capacities of institutions that are strategically placed to reach workforce in remote areas, but who have not had the opportunity to develop their institutional skills.

Therefore, rather than starting with a ‘network of excellence’, this proposal is based on a premise that a mix of institutions with complementary characteristics and competencies at different levels of institutional maturity can, working together, build collective quality expertise over time. This is possible if there are clear targets, joint planning, inter-institutional mentoring, mechanisms for mutual accountability and well-designed incentives that make institutions want to collaborate enthusiastically in a self-driven way.

Figure 5: Preliminary institutional competencies that could be used for identifying and selecting the most suitable institutions

<table>
<thead>
<tr>
<th>Institutional characteristics</th>
<th>Institutional capabilities</th>
<th>External interface</th>
<th>Capacity building mechanisms/ strategies</th>
</tr>
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</table>
| Relevant technical expertise (academic, capacity development, TA provision, vocational training) | Skills in specialized areas:  
  - Health supply chain  
  - Management and leadership  
  - Technology  
  - Monitoring and evaluation  
  - Human resources  
  - Strategic planning  
  - Immunization  
  - Health systems strengthening  
  - Community mobilization  
  - Equipment maintenance  
  - Institutional strengthening  
  - Gender  
  - Capacity development  
  - Knowledge management  
  - Developing and maintaining communities of practice  
  - Defining standards  
  - Research and development, especially on learning modalities | Collaborative learning programmes  
  - Service provision/consultancy to government, private sector, civil society, etc.  
  - Training courses (classroom-based, online, on-the-job training)  
  - Graduate placement  
  - Industry/private sector involvement  
  - Staff/student exchange  
  - Participation in global and local professional associations, etc.  
  - Trustworthiness demonstrated by a history of interinstitutional synergies  
  - Openness to partnerships  
  - Collaboration with private sector, other universities, training institutions, government | Personalized learning  
  - Feedback systems (internal evaluations, etc.)  
  - Incentives for academic excellence  
  - Functional integration across technical areas  
  - Interdisciplinary  
  - Capabilities to adapt content according to gender and interculturality perspectives, traditional knowledge  
  - Takes into consideration age/generation, life-cycle and ecosystemic vectors  
  - Situated knowledge capable to contextualize information according to local health, socioeconomic, cultural and political parameters  
  - Interconnected content and learning strategies |
Four options for implementing the framework at country level

The knowledge-based TA system framework assumes that increasing the competencies of the supply chain workforce will lead to strengthened capabilities of the supply chain system. The following four options have been identified for potential implementation at country level:

1. Subnational entry point to develop a national TA system. This option prioritizes the supply chain workforce in more challenging environments. It is led by local governments, while securing buy-in and coordination at central levels. The process will eventually evolve to become a national network capable of interacting with similar initiatives in other countries and regions.

2. Subregional multi-country network. This modality optimizes existing academic and training institutions that collectively combine supply chain and additional expertise (e.g., management, technology, education) and that are capable of multi-country certification and accreditation.

3. Country national or subnational twinning. This is an opportunity where two countries agree to support each other – at national and/or subnational levels – in developing and implementing a mutually reinforcing and continuous improvement TA plan.

4. Future-ready regional supply chain innovation hub. This model builds on the host country’s technical and financial capabilities and regional influence to provide tailor-made support to countries with different TA needs according to their supply chain maturity. It has the potential to also become a source of innovative financing as more countries transition from foreign aid after reaching middle-income status.

These options are indicative of how a collaborative TA network could be implemented over time depending on the characteristics and priorities of the country. While each option has a unique value proposition, a combination of two or more models could be implemented depending on the context.

The linear structure of supply chain enables the possibility of rapidly implementing novel TA systems that can be monitored and their impact measured through existing tools (e.g., EVM 2.0).
Going forward, countries should design a TA delivery architecture for their supply chain system using the six new transformative TA approaches – country-centred design, talent transformation, market shaping, digitalization, maturity measurement and knowledge labs – to drive country TA plans and investments.
The TA technical delivery implementation framework below was developed using elements from the UNICEF health systems strengthening approach, the Gavi Partner Engagement Framework, the Global Strategy on Human Resources for Health 2030, and PtD Human Resources for supply Chain Management theory of change (see Figure 5). It emphasizes the key components to operationalize the fit for purpose TA delivery implementation. The green boxes underscore what countries are generally doing well. The red ones summarize persistent gaps that aim at being addressed by the new framework to ensure the key results: enabling policies, adequate funding, strong local institutions and skilled human resources.

There are six new approaches that aim at guiding the operational structure of the TA framework (see Figure 6). The six areas are key pillars for leveraging the full range of partners and aligning programme investments to build the competencies of the supply chain workforce and capabilities of the system through innovation, productive knowledge and efficiency of the work processes.

Figure 5: TA delivery implementation framework
New transformative TA approaches

The following three pillars respond directly to the structural elements of the proposed collaborative, networked and distributed TA system:

- **TA ecosystem for market shaping** – This propels and sustains the creation of a balanced TA market (supply/demand equilibrium) that ensures the availability, quality and efficiency of essential TA services and products. Ultimately, a market shaping intention applied to TA systems will meaningfully engage the workforce to be active stakeholders in modelling the evolution of the delivery of TA according to their needs. It will also onboard local institutions to disrupt the current TA market blueprint by further developing their capacity to collectively design and deliver quality, locally-relevant and accountable TA.

- **TA architecture and country-centred TA design** – The overall strategy of this area should focus on the development of a performance matrix that correlates TA with competencies, HR information systems, and system performance; and aligns workplans to related country supply chain activities (e.g., EVM process); as well as an articulated learning and training system that could address capacity development progressively.

- **Didactical engineering for talent transformation** – Applied to the framework, this relates to the way local institutions will develop a TA learning collaborative to drive a collective approach to
Instructional delivery for talent transformation of the supply chain workforce. It takes into consideration the organizations’ technical, financial, and human resources as well as their capacity to provide context-specific TA according to local characteristics at subnational levels.

The next three pillars are operational aspects that introduce innovation in the delivery and measurement of the impact of the applied TA framework:

- **TA knowledge labs** – Methodologies and approaches that systematically capture and implement ideas and local solutions proposed by human resources for health (e.g., reverse innovation), become a strong motivational force for retention. Engaging the supply chain workforce through knowledge labs, incubators and accelerators can promote creativity, unblock or mitigate attitudinal barriers of access to training and learning in priority areas, and increase ownership of localized TA plans.

- **Digitalization** – The rapid pace of technological innovation that has accompanied supply chain upgrading during the last decade has not crossed over to TA delivery. Digital, blended and microlearning as well as simulations must be mainstreamed in TA plans to optimize these investments. The supply chain workforce needs to rapidly acquire new mindsets and skills that can only be propelled by incorporating new technologies in the learning architecture.

- **Maturity measurement** – Designing collective TA architectures also need novel monitoring and evaluation frameworks. Measuring the impact of this new way of working in supply chain maturity progression is key to assess TA quality and accountability of TA providers.

Advocacy for policy changes in countries is required beyond capacity development to support this new approach of TA as countries develop TA plans which build a pathway for a stronger coalition to drive mutual accountability mechanisms and ownership for programme and supply chain improvement within the MOH and among partners.

TA investment should also prioritize the following key areas listed below:

- Context-specific TA delivery architecture
- Community-led performance monitoring
- Domestic financing and private sector investment

Going forward, countries are advised to adopt, invest, capacitate and scale up the use of the six new transformative approaches – country-centred design, talent transformation, market shaping, digitalization, maturity measurement and knowledge labs – as they plan and implement TA.
Conclusions and next steps

TA should be planned as agile and flexible interventions, with innovative systems capable of addressing uneven national needs and the rapidly changing supply chain capacity and socioeconomic landscapes of countries.
A highly functional and resilient supply chain requires major investments in systems, processes and workforce. TA should be planned as agile and flexible interventions, with innovative systems capable of addressing uneven national needs and the rapidly changing supply chain capacity and socioeconomic landscapes of countries. The linear structure of supply chain enables the possibility of quickly implementing novel TA systems that can be monitored and their impact measured through existing tools (e.g., EVM, maturity models).

Next steps

The planning of next steps can be outlined in three phases:

1. Preliminary – The core TA partnership, including technical and financial support, will be defined at global and regional level; and country readiness will also be identified to converge the interests of the government and that of the donor community. At the regional and national level, consultative processes will guide multi-stakeholder commitments, define coordinating mechanisms, as well as map and select training institutions according to capabilities, localized contexts and capacity to deliver.

2. Implementation – Together with the supply chain and relevant stakeholders at national level and in priority subnational areas, build a capacity development architecture and action plan for collective TA delivery that includes a roadmap for TA levels as they relate to supply chain maturity and a definition of TA delivery as a continuous improvement process.

3. Replication and scale – From the outset, replication and scaling up strategies will need to ensure high-level oversight and commitment to develop a national TA network; establish a system of onboarding new institutions as the initiative scales up; and facilitate south-south collaboration with other countries and regions implementing similar initiatives.

A systems approach to TA also permits optimizing and streamlining existing efforts as part of broader health systems strengthening and HR plans. Introducing a country-led TA system will require redefining the roles of TA partners. Participation of TA partners throughout the process will help them to proactively design future-ready roles.

The role of UNICEF

Together with countries and partners, UNICEF will continue to support advocacy, planning and implementation as described below:

- Advocacy – UNICEF will advocate at global, regional and country levels to facilitate adoption of principles and approaches.
- Multi-stakeholder planning – UNICEF will act as a facilitator for TA design, together with in-country partners.
- Collaborative planning & implementation – UNICEF will identify entry points and support partners with complementary competencies for TA implementation.
- Evidence generation – UNICEF will capture best practices from both the public and private sectors.

Actions

The iterative process of defining TA needs, budgeting and implementation in countries requires specific country-driven actions to drive accountability, value for money and sustainability comprising:

- Targeted investment in building the capabilities of local partners for TA planning and delivery
- Contextualized knowledge-based TA system linked to local HR systems.
- Collaborative network of local partners as TA implementers.
- An interdisciplinary and multi-professional community of best practice comprising network of local organizations for learning and innovation.
- Focus on sub-national capacity, gender programming, new technologies and local competency development for TA delivery
Annex

Desk review documents


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