

The Health Supply Chain Workforce, the missing link to Universal Health Coverage

The global health community has agreed to accelerate efforts to achieve **Universal Health Coverage (UHC)** by 2030, as many people in low and middle-income countries do not yet have access to health services nor access to safe, effective, quality and affordable essential medicines and vaccines.



Access to quality health care and essential medicines will have significantly positive impacts on life expectancy and maternal health.ⁱ

The Supply Chain Workforce is overlooked

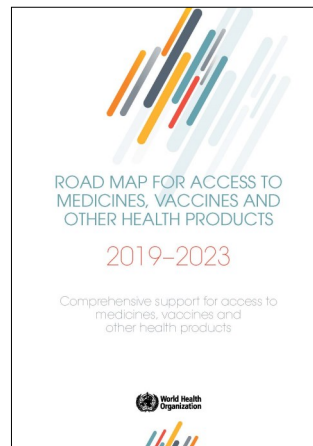
UHC requires an efficient and well-performing health system that provides the entire population with access to good quality services, health workers, medicines and technologies. For a country to achieve UHC, well-trained and motivated health workers are needed to provide the services patients need. An important health worker that is often overlooked but necessary for the expansion of services and supplies is the **health supply chain worker**.

The Supply Chain requires many professionals

And who is this health worker? **Pharmacists, logisticians, supply chain managers, data managers, warehouse, transport personnel, and many others** – all of whom are collectively tasked to ensure the appropriate commodity selection, forecasting, procurement, storage, distribution and use of health products.

Value of the supply chain confirmed by WHO

Lack of specialized skills required for the procurement and supply management of quality assured health products are highlighted in the WHO “Road Map for Access to Medicines, Vaccines and Health Products 2019-2023.”ⁱⁱ



Preventing, detecting and responding to shortages of health products is a major challenge. An inefficient supply chain can lead to high levels of wastage, with significant consequences in terms of access. The Road

Map supports a workforce that is **fit-for-purpose in key areas such as procurement and supply chain management**, with skills to forecast needs, to develop procurement processes, for warehousing and distribution, stock management, maintenance, and more.

Increasing pressure on health supply chains

All too often the health supply chain workforce is not considered when decisions are made to introduce more or new products into the health system. With the introduction of new health products, specialized skills to ensure their quality, safety and efficacy and their efficient procurement and supply are needed.

When new vaccines were introduced in a country a decade ago it came with a 24-fold increase in value,ⁱⁱⁱ but it also resulted in a five-fold increase in the workload for supply chain management. It is important to note that the number of new products launched at the global level is expected to grow to 54 new launches yearly through 2023 and global spending on medicines will exceed US\$ 1.5 trillion by 2023.^{iv}

Furthermore, the workload will also continue to increase due to changing disease profiles, and accelerated efforts to achieve universal access to health^v. The burden of this workload will eventually be borne by the health supply chain workforce. Medicine spending in emerging economies including low- and middle-income countries is expected to increase 22-57% by 2023.^{vi}



Decisions to increase the availability of health commodities in a country **must take into consideration the ability of the supply chain workforce to absorb the extra workload**, which might require expanding the workforce, reorganizing the workforce to make it more efficient, and providing education, **training and professional development** to address the needed technical competencies.

A global survey from 2017 demonstrated that 40% of logistics professionals in emerging countries are challenged by the lack of qualified staff with logistics skills at the operative, administrative and supervisory levels in emerging regions.^{vii} Time allocated to training is not enough,^{viii} the choices for supply chain training are unsatisfactory, and access to formal in-service supply chain training is limited.^{ix}

WHO supports strengthening capacities of supply chains, advocating for inclusion of needed procurement and supply chain management cadres in national policies and plans, and ensuring the appropriate competencies for procurement and supply chain management can be developed. WHO foresees that **roles related to procurement and supply chain management will require increased numbers of workers and the creation of new jobs.**^x

Procurement and SCM cadres

Several countries have cadres, trained professionals, responsible for procurement and supply chain management or have explicitly integrated supply chain functions into their existing health workforce.

Evidence from the Pharmacy Assistants cadre in Malawi,^{xi} introduced to improve medicines management and pharmaceutical practice in health centers, has shown an improvement in data quality, storeroom management and patient care at health facility level.

To address challenges in public health supply chain performance, Tanzania invested in a national logistics management unit (LMU), a unit dedicated to the health supply chain. Coupled with better use of data, the investment led to a positive impact on key supply chain outcomes, especially stock-out rates and stock-out duration.^{xii} Similarly, in Nigeria Logistics Management Coordination Units (LMCUs) were created in 2015 in 37 states and 774 local government administration (LGA) levels to lead the monitoring of supply chain performance, build supply chain management capacity of health facilities, and strengthen logistics data availability. These are considered as an important step towards creating a dedicated cadre for supply chain management.

The Future

As international agencies transition out of public health commodity procurement on behalf of countries, governments need to build effective capacity to manage strategic purchasing and procurement. Are they ready? Do they understand the obstacles in building and retaining a skilled supply chain workforce in more competitive markets?"

To this end, governments and/or national supply chain organizations will need to model the required national and sub-national capacity in strategic procurement, market shaping, financial management, and budgeting. They will also need to foster new career pathways for professionals across sectors that reward the ability to extract knowledge from data.



Therefore, when designing health supply chains for the future,^{xiii} a key lesson is the need for a stronger focus on capacity building for **new era skills in data science, analytics, outsourcing, contracting, monitoring, and supply chain performance across the public and private sectors.**

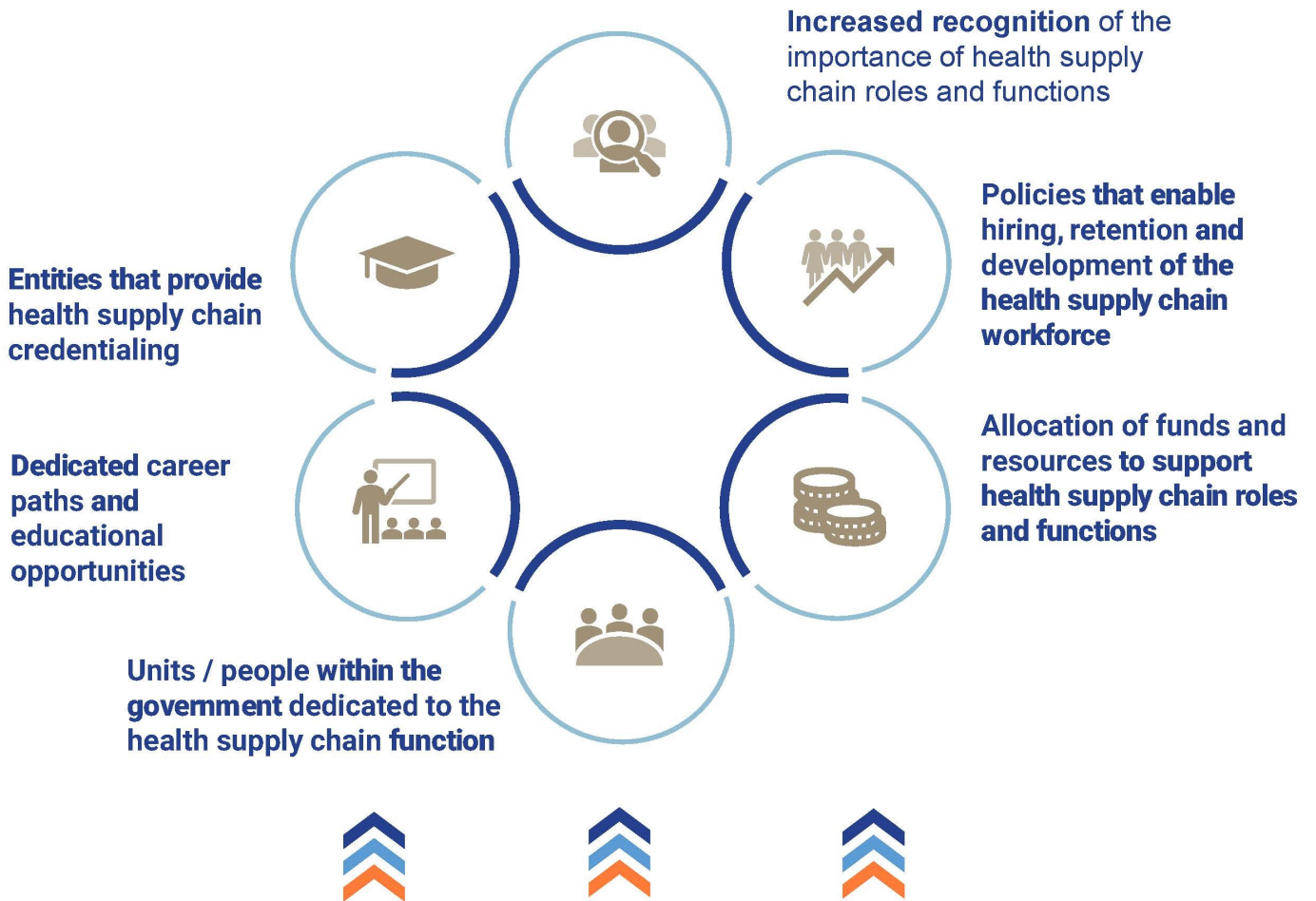
Current situation of Human Resources for Health Supply Chain Management

Complex Environment

- Although hundreds of millions of dollars in commodities may flow through a country's health supply chain (SC) system, the **critical, strategic function of the supply chain within health systems is rarely acknowledged** with little investment made in SC staff, while labor is a major driver of SC costs.
- The SC workforce **lacks the technical and managerial competencies** to perform optimally or has the empowerment to affect supply decisions and policies.
- Many low- to middle-income countries have an **insufficient number of adequately trained staff**, particularly logistics staff, to manage health supply chains.^{xv} Countries face significant gaps in technical capacity and knowledge among their existing health SC staff, often due to the lack of experience or formal training, either through SC and logistics degree programs or in-service training for staff.^{xvi}
- Domestic and external donor **budgets are not coordinated**, which leads to challenges in addressing these problems.
- **Program and country budgets cover medicines, distribution, and transportation costs, but often do not include staffing for supply chain activities.**
- Despite a 300% increase in procurement, there has been little change in SC staffing, leading to **critical staff shortages**.^{xiv} Limited capacity and financing leads to stock-outs of essential medicines, wastages, and ultimately death.
- Many low- to middle-income countries **lack a professionalized supply chain occupational category**, formed via formal education or through the civil service structure.^{xvii} This professionalization is critical to embedding a workforce with specific SC competencies in the health system, for procurement, planning, warehousing, distribution, transportation and many more.
- **Working conditions do not support performance.** Salaries are inequitable, staff lack job descriptions, and there is duplication of roles and chain of command. This results in poor retention through staff leaving or moving horizontally.



A Call to Action



- Improved policies, organizational design, and organizational strength in key public and private sector, non-profit and commercial organizations with supply chain responsibility, providing funding and support for a competent and sufficient health SC workforce
- Increased and improved resources (government, non-government, national, and international) to support a qualified and educated health SC workforce
- HR Systems to plan, finance, develop, support, and retain a competent workforce
- Improved mechanisms to support professionalization of a qualified and educated health SC workforce

Who we are

People that Deliver (PtD) was established in 2011 when 79 institutions came together at the WHO and pledged their support and action to **strengthen the capacity of the health supply chain workforce, while promoting the professionalization of the supply chain role within the broader health system.** PtD has become the global coalition focused on technical leadership in human resources (HR) for supply chain management (SCM). It does this by advocating for a systematic approach to HR for SCM and for interventions that improve the demand and supply of qualified health supply chain professionals. PtD's **one goal is to create a competent, supported, and adequately staffed supply chain workforce that is deployed across the public and private sectors within the health system.** The PtD Coalition was created as the primary governing body that develops strategies and provides broad guidance and oversight to support PtD's operations and key priorities. Coalition organizations are as follows:



PtD Coalition and Secretariat, Cape Town, South Africa, June 2019

- Association des Logisticiens Béninois (AsLoB)
- Chemonics
- Empower School of Health
- Gavi, the Vaccine Alliance
- The Global Fund to Fight AIDS, Tuberculosis and Malaria
- Guidehouse
- International Federation of Pharmaceutical Wholesalers (IFPW)
- International Pharmaceutical Federation (FIP)
- IntraHealth International
- John Snow, Inc. (JSI)
- Management Sciences for Health (MSH)
- Ministry of Health Benin
- Massachusetts Institute of Technology (MIT)
- Nigeria Supply Chain Integration Project (NSCIP)
- Pharmaceutical Systems Africa (PSA)
- Reproductive Health Supplies Coalition (RHSC)
- SAPICS
- Transaid
- UNFPA
- UNICEF
- USAID

Learn more at www.peoplethatdeliver.org

Contributors

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Endnotes

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Photo Credits

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- © UNICEF/UNI106742/Asselin Democratic Republic of the Congo 2011. Supervising Nurse Sylvain Kassongo places a delivery of vaccines in a refrigerator, in the UNICEF-assisted health centre in the town of Kipushi, in Katanza Province.
- © UNICEF/UNUNICEF/UN0188875/Keïta Mali 2018. Mother of 4-day-old baby and nurse in the infirmary at the Reference Health Centre in Bougouni.

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