Acknowledgements

This work has been a joint activity of People that Deliver (PtD), SAPICS, USAID and the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project.

The authors would like to thank the members of these organizations for their contribution and cooperation as together we seek to increase the availability of medicines to beneficiaries. Many individual colleagues gave freely of their time for interviews and to engage in focus group discussion for this work, we thank you for your contribution. This work was funded by the USAID Global Health bureau’s Family Planning and Reproductive Health (FP/RH) program.
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Overview

To better understand issues in the availability and use of Supply Chain Management (SCM) human resources in a country context, the USAID Global Health Supply Chain Programme-Procurement and Supply Management (GHSC-PSM) project, in conjunction with USAID and People that Deliver (PtD), considers that a "whole of SCM labour market" approach provides a deeper and more holistic understanding of the SCM employment environment.

Whole of SCM labour market refers to the supply and demand for SCM labour in which employees are the supply and employers the demand in a specific country context. The country context includes urban, regional, and more remote environments and encompasses all the sectors where SCM technical personnel are employed in that country.

Key stakeholders include government (ministries of labour, education, planning, and health, etc.), professional associations, academic institutions, private sector (resources industries, fast-moving goods, health, third-party logistics providers (3PL) and fourth-party logistics providers (4PL), etc., and the humanitarian and development sectors.

In 2019 GHSC-PSM, in collaboration with PtD, SAPICS and USAID published a SCM Professionalisation Framework white paper outlining how a SCM professionalisation framework could be used by:

- Governments to define the professional standards of the profession
- Employers to articulate SCM competency requirements and career pathways in their organisations
- Institutions of learning to define clear learning and teaching courses
- SCM employees to map out a professional career in SCM

In 2020, the same consortium has worked together to complete the necessary elements of the ‘SCM professionalisation framework’. This framework has a ‘Library of Competencies & Designations for Health’
Supply Chains’ as its core meeting public and private sector needs. The competency framework then acts as the ‘standard’ to ensure an aligned ‘Mapping of Education for Health Supply Chains’ (supply) and ‘Collection of Roles and Job Descriptions for Health Supply Chains’ (demand), for a particular country context. Further, a ‘Implementation Approach for Health Supply Chains’ provides clear guidance on how to begin this journey of change. Figure 1 shows the interrelationship of these elements.

Although each of the SCM Professionalisation Framework components can be used by themselves it is believed that most benefit is obtained from using the ‘Implementation Approach for Health Supply Chains’ to create lasting systems change.

Library of Competencies and Designations and Health Supply Chains

Building on the PtD Health Supply Chain Management (HSCM) Competency Compendium (2014), this serviced based (non-cadre specific) framework presents seven competency domains that covers the practice of HSCM across the public and private sector Figure 1. This comprehensive framework provides ‘behaviour statements’ outlining workplace expectation in all listed competency domains and competency groups. This revised version provides a five-level maturity or designation classification for each competency area, acting as a ‘standard’ for comparing education requirements and related job descriptions.
Collection of Roles and Job Descriptions for Health Supply Chains (Demand)

Building on previous work conducted by PtD (2018), this tool provides a systematic way to build job descriptions and consider SCM roles with reference to the Library of Competencies & Designations for Health Supply Chains. An example set of SCM job descriptions and organisational charts are provided.

Mapping of Education for Health Supply Chains (Supply)

This tool provides an explanation of how an education and training framework should be considered within a country context, to align with SCM job roles. The tool also uses a machine learning approach to review existing SCM education and training opportunities to determine alignment with domains and levels within the Library of Competencies & Designations for Health Supply Chains.

Implementation Approach for Health Supply Chains

This tool provides an overview of the step by step activities that can be undertaken over a three-week period to engage local stakeholders advocating the need to implement a SCM Professionalisation approach. This methodology also validates a plan of action to apply the Library of Competencies & Designations for Health Supply Chains, Collection of Roles and Job Descriptions for Health Supply Chains and Mapping of Education for Health Supply Chains to systematically improve SCM professionalisation in the country context.
Internationally, the use of competency-related terminology can vary, so the following definitions are offered here to encourage common understanding:

**Competency compendium**: A comprehensive catalogue of competency areas with associated behavioural competencies referencing common supply chain processes and job level activities.

**Domains**: The high-level groups, or clusters of competency areas, within the compendium. Traditionally, domains do not exceed six. The six domains used in this PtD competency compendium are selection and quantification; procurement; storage and distribution; use; resource management; and professional and personal (Figure 3).

**Competency area**: The overarching capacity/skills of a person to perform in a specific area. For example, within the domain of procurement, PtD has suggested the following competency areas:

- 2.1 Manage procurement costs and budget
- 2.2 Build and maintain supplier relationships
- 2.3 Manage tendering processes and supplier agreements
- 2.4 Execute management of contract, including risk and quality management
- 2.5 Assure quality of products
- 2.6 Manage import and export of products
- 2.7 Manage donations of products
**Behavioural competencies:**
Expressions of what work activities are performed, and is observed when professionals apply motives, traits and skills to a relevant task.

For example, for the domain of procurement and the competency area of manage tendering processes and supplier agreements, such behavioural competencies may include “develop bidding documents”, “use WHO prequalification system to confirm quality suppliers”, “manage a tender process using country systems”, or “formalize contracts with successful companies.” This compendium contains behavioural competencies and references to required knowledge, depending on the source document used.

**Competency framework:**
A collection of competency areas with associated behavioural competencies that define the expected requirements of a particular cadre/profession (Figure 2).

For example, a competency framework may be developed for a warehouse manager, while a separate competency framework would be required for a pharmacist. The composition of country-based, cadre-specific competency frameworks will also depend on the structure of the supply chain and at which levels various competencies are allocated.
Designation levels:

Accommodating the differing levels work focus and scope as well as denoting training and education required at each level. Each designation level has been aligned to ensure articulation between levels or elimination of competency overlap. The competency framework is divided into designation levels namely:

**Associate**
Associate level is the entry level of the competency framework. This is an execution level designation.

**Practitioner**
Practitioner level is the first management level in the competency framework. This is an execution level designation with some supervisory and management competencies.

**Specialist**
Specialist level is the mid-management level designation. Typically associated with management level accountability depending on domain.
Professional level is the first strategic level designation and is typically characterized by analysis and input into strategic decision making.

Leader level is the primary strategic level designation and is characterized by long-term decision-making competencies.

Each designation level has a set of associated verbs which denote the level and nature of a particular competence the individual must possess in order to fulfil the workplace duties associated with a specific activity.

e.g. In the Storage Domain the behavioural competency:

Ensure accurate verification of rolling stocks, the Associate designation level is required to have an "Awareness of the importance of accurate verification of rolling stocks" while the Practitioner needs to "Understand the importance of accurate verification of rolling stocks".

In this case the difference is indicated by the verb Awareness and Understand, there are several verbs used across the competency which have been referenced from multiple educational and vocational resource.

As displayed in the excerpt from the competency framework below:
Methodology

The very nature of a professional body is that it encapsulates a path to professionalisation. For this reason, the PtD Competency Compendium for Health Supply Chain Management is an ideal base for the Library of Competencies & Designations for Health Supply Chains. In order to encapsulate a full pathway however the competencies needed to be expanded in responsibility and complexity. Additionally, PtD had already gone through an extensive review cycle on the document and has well researched additions to the framework. These additions were added before expansion of the competencies and then built out in the same manner as the rest of the framework.

In addition to the expansion according to the previous review, the authors conducted an extensive review, comparing it to current best practice supply chain process frameworks in order to verify its validity in the broader sense of supply chain management, where necessary wording was expanded however this analysis was used more in building out the framework into the higher and lower levels as required. In order to build out these levels the authors had to first define how many levels would be needed for this there were a few inputs, the first was the structure of other supply chain professional body frameworks and the second was job descriptions and hierarchies from private and public organisations either generously donated or from previous projects which would both allow the framework to be compatible with the majority of hierarchies as well as other professional bodies in the sample set (Appendix A). From these inputs it was determined that five levels would be required to capture the complexity exhibited by these documents bearing in mind that the levels are in themselves only indicative and can be edited by countries in their own implementations.

In order to expand the PtD Competency Compendium for Health Supply Chain Management into those levels it was required to use a trusted framework to expand the responsibility and complexity requirements of each competency. In order to keep a standard toward this, blooms taxonomy’s cognitive and affective domains are used to increase complexity of the competence and the previous analysis using supply chain frameworks is used to increase responsibility as domains increase in level using appropriate verbs associated with the domain aligned to the designation. The final domains chosen are named accordingly and are aligned to blooms taxonomy accordingly:

- Associate
- Practitioner
- Specialist
- Professional
- Leader

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Evaluation</th>
<th>Synthesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate</td>
<td>Associate</td>
<td>Practitioner</td>
<td>Specialist</td>
<td>Professional</td>
<td>Leader</td>
</tr>
</tbody>
</table>
Competency level descriptors which show articulation between supply chain roles, denoted by designation levels which may be applied by professional bodies. Each level encompasses a range of potential job roles but does not prescribe individual role names.

- **Associate**
  - Associate level is the lowest level of the competency framework. This is an execution level designation.

- **Practitioner**
  - Practitioner level is the first level in the competency framework. This is an execution level designation with some management competencies.

- **Specialist**
  - Specialist level is the management designation. Typically associated with warehouse manager type of level depending on domain.

- **Professional**
  - Professional level is the first strategic level designation and is typically characterised by analysis and input into strategic decision making. E.g. Deputy Director of Supply Chain Organisations.

- **Leader**
  - Leader level is the primary strategic level designation and is characterised by long term decision making competencies. E.g. Director of supply chain organisation.

<table>
<thead>
<tr>
<th>COMPETENCY</th>
<th>BEHAVIOURAL COMPETENCIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.1 Understand use of medical products (e.g., safety procedures, dispensing protocols, standard treatment/testing guidelines)</strong></td>
<td>Identify medicines by their generic name</td>
</tr>
<tr>
<td></td>
<td>Describe the way medicines work, their use (how much, how often and for how long), and their main adverse effects and cautions</td>
</tr>
<tr>
<td></td>
<td>Identify that some signs and symptoms might be caused by medicines</td>
</tr>
</tbody>
</table>

The domain will increase in complexity and responsibility as they move from one designation level to the next.

Each designation level has a set of verbs that are associated with it that denotes the level and nature of a particular competence; the individual must have in order to demonstrate that the individual has that competence.

E.g. In the Storage Domain for the behavioural competency: Ensure accurate verification of rolling stocks, the Associate designation must have an Awareness of the importance of accurate verification of rolling stocks while the Practitioner needs to Understand the importance of accurate verification of rolling stocks. In this case the verb difference is Awareness and Understand, there are a number of verbs used across the competency which have been sourced from multiple educational and vocational resource.
The SCM Professionalisation Framework aims to professionalize supply chain management personnel which should have the effect of streamlining multiple aspects of supply chain management in a country or organisation. However, this country or organisation must know to need these personnel, in other words a demand must be created. The Collection of Roles and Job Descriptions for Health Supply Chains was created for this purpose, it outlines ways in which the Library of Competencies & Designations for Health Supply Chains can be organized operationally to create this demand.

There are several ways that this job description (JD) compendium can assist you, whether you are involved in operations management or workforce development.

This compendium was designed to be a reference guide for human resource and supply chain practitioners in the field to assist them in designing their organisational hierarchies and planning for human resource initiatives across the healthcare supply chain.

Whilst the job description templates are provided as a point of reference for workforce development activities, they are best utilized with the associated PtD Professionalisation Approach, which contains details pertaining to whole of labour market considerations where these templates are used as a component in creating a tailored workforce development plan.
Methodology

The Collection of Roles and Job Descriptions for Health Supply Chains (Demand) was created with primary input from previous work done within PtD which takes input from multiple country examples to create the base job descriptions. These base job descriptions were then compared in detail to set of hierarchies that encompass the majority of roles as below to create the hierarchy found in this document, based on aggregated descriptions of the job descriptions studied, the base job descriptions were assigned a primary domain and primary competencies. It must be stressed however that the example in this document is only one of many ways to combine the job descriptions.

Once the base job descriptions were created the metrics and training needed to be defined. In order to define the training and metrics, the domains in which the job descriptions reside and the primary competencies were used to align the job descriptions to various supply chain management frameworks which define standard practices and metrics for the activities with which the job description pertains, these alignments were then used to assign standard metrics to the job descriptions.

Finally using the competencies assigned to each job description, the Mapping of Education for Health Supply Chains was used to fill in possible education that teaches the competencies required for an individual to take up each job description.

To fully utilize the compendium, one must look at the attributes of a job description (JD) which are structured using the following table headers:

- The organisation within which the role exists
- The level of the organisation the role occupies organisationally
- The serial number uniquely identifying the JD
- The SC process to which the role primarily contributes
- The name of the role
- The subordinate roles which report to this role in the scenario
- The competencies of the organisation
- The competency level
- The primary process
- The job role
- The organisation
- The serial number
- The primary process
- The job role
- The organisation
- The serial number
- The primary process
- The job role

Figure 2: Description of how the Collection of Roles and Job Descriptions for Health Supply Chains is constructed
5.1 Design and implement supply chain system and strategies

- Design a responsive, agile and efficient supply chain that has the ability to meet the changing needs of customers and deliver high-quality products with short lead times at low cost.
- Establish the interrelationship of organisations, people, technology, activities, information, and resources involved in moving a product from supplier to customer.
- Illustrate the management activities carried out in the course of running an organisation, including controlling, leading, monitoring, adjusting, organising and planning.
- Strategically analyse the characteristics unique to public health, demonstrate awareness of the factors that could contribute to or hinder the delivery of logistics services.
- Strategically analyse emerging concepts and principles in public health logistics; adapt current practices to incorporate new developments in the field.
- Strategically analyse which type of inventory control system will be most effective for a particular programme or context.

Key Performance Indicators:
- Assess Delivery Performance Cycle Time - Actual time from assessed requirement to time delivered to end-user compared to committed Delivery Cycle Time as per Supply Chain strategy.
- Assess Supplier Performance Cycle Time - Actual Supplier performance cycle time versus Supplier commitment cycle time.
- Inventory accuracy - Cycle count results.
- Transportation lead time accuracy - Actual Transportation lead time versus Transportation promised lead time.
- Transport efficiency - Total cost of transport versus planned cost of transport by mode.
- In-bound cost of acquisition - Actual total cost of acquisition versus Total Planned cost of acquisition including landed costs.
- Performance Report - Actual versus Plan reports for all metrics.
- Manage performance cycle time. Actual Supply Chain Performance required versus Actual. This is a roll up metric.
- Finance secured and expenses managed in line with supporting distribution operations.

Training:
- Supply Chain Management
- Report Writing
- Data Management
- Total Quality Management (TQM)
- Business Rule/Policy Management
- Controls and Compliance
- Monitoring and Evaluation

Qualifications Available:
- Advanced Diploma in Quality Management
- Bachelor of Computer Technology

Certifications Available:
- SPSM3 TM (Enterprise-Wide Procurement Influence)
- Occupational Certificate: Health Information Manager
- APICS Certified supply chain professional certificate
- SPSM Level 4 (External Procurement Influence)
- Lean Six Sigma Certification in Finance black belt

A list of suggested Key Performance Indicators that are indicated for this role.

Available qualifications to satisfy the requirements of this job description.
- *this list is not exhaustive and serves as guidance not prescription.

Suggested occupational training that may be indicated for this role.

Available certifications to satisfy the requirements of this job description.
- *this list is not exhaustive and serves as guidance not prescription.
While these are standardized job roles, it is fully expected that countries will alter and merge the JDs according to their needs.

**Level definitions:**

Organisations levels are defined in the compendium according to the following hierarchy:

**Strategic:**
Applies strategic, systems thinking; directs and advises, manages change, and influences internal and external stakeholders.

**Managerial:**
Develops, improves and fulfils organisational and functional objectives; manages efficiency, quality, risk.

**Operational:**
Provides, executes guidance on procedures and processes connected.

**Tactical**
Executes the process and assists operational levels to perform their overarching duties.

**Organisations:**

**Public health system organisation:**
This refers to the organisational structures found in public sector health systems established to deliver health services to country populations. The primary purpose of the organisations that collectively make up the public health system is to ensure access to quality care through programmes targeting men, women, children and populations. As access to quality medicines, supplies and equipment is a core component of care, the public health system also ensures that systems are in place to design, procure, deliver and manage in supply chains. This compendium refers to public health system roles that are involved is ensuring functioning supply chain (SC) systems are in place while not necessarily executing the SC functions (these SC functions and roles are captured under the SC Organisation type). Meanwhile, this organisation type includes the service delivery levels of public health system (such as hospital, clinics, and community health posts) that play a role as “customers” of supply chain systems.

The public health system is also typically tiered, where decision making authority for health and SC programmemeing is the purview of a high level structure (a Central body, or a State or Regional structure under devolved health systems), and functions and roles are ‘cascaded’ to lower, intermediate levels (such as regions in the case of Centralized public systems, or provinces. districts etc.)

**Supply Chain (SC) Organisation:**
This refers to the entities involved in carrying out core SC functions to service the needs of the public health system with quality, timely, and
adequate medicines, supplies, and equipment. The SC Organisation may be public sector owned, a parastatal or a privately owned entity. The compendium of roles for this organisation type is intended to reflect the full scope of functions and roles involved to ensure high performing, reliable supply chains. Typically, the SC Organisation will include structures in different locations (such as branches or hubs) to more cost-effectively provide SC services closer to populations.

**Scenario hierarchy:**

The *Collection of Roles and Job Descriptions for Health Supply Chains* provided only displays one possible organisation of job roles in a country and as such some choices have been made to encapsulate one specific scenario and that is a version of a semi-autonomous Supply Chain organisation. As such it is assumed that the primary seat of supply chain domain knowledge is held by this organisation. Assuming this, the highest level of public health would then perform a regulatory and compliance role keeping the SC Organisation in compliance and synchronized with national priorities.

What this means is that any supply chain role within intermediate all the way down to community level will report into the supply chain organisation creating a flow of reporting and information that will align to the public healthcare supply chain operating model. The hierarchy used for this scenario is displayed in Figure 6 below. The organisations in this document are also colour coded according to the below diagram.

![Figure 3: Depiction of hierarchy used for generation of standardized job descriptions with corresponding colour codes.](image-url)
Mapping of Education for Health Supply Chains

To improve the supply of supply chain professionals there needs to be significant support for it in academia as well as from vocational training providers, certification and professional bodies in-country. To this end PtD has developed a list of available qualifications and certifications that can assist in acquiring the skills needed to be deemed a professional in the healthcare supply chain sector.

This list is by no means exhaustive nor is it prescriptive, it is only a reflection of courses readily available to the authors at the time which directly map to the skills and competencies specified in the competency framework and job descriptions. It includes more than 250 courses from various providers around the world.

In the Education Framework document, the user will find a similar structure to the competency framework, the difference is that there are no competency descriptors but rather in their place, a list of courses that have exhibited content for those competency descriptors.

The Education Framework is designed to give the user a broad idea of the types of education that is available to fill in the skills gaps found in the country, but it is recognised that each country may have its own regulations and prerequisites.
Methodology

In order to build out a Mapping of Education for Health Supply Chains a model needed to be chosen, the author team had a firm grasp and easy access to one of the leading education frameworks in Africa, namely the South African Qualifications Authority (SAQA). SAQA contains for than 14000 qualifications for evaluation spanning various subjects including but not limited to public healthcare. (see Appendix C: SAQA structure)

Thus, because this dataset was unfocussed the first step needed to be to filter our irrelevant courses. To filter out the irrelevant courses the competency framework was used as a first pass filter, anything that did not directly relate to the competency framework was removed leaving 436 courses that related to the 7 domains of the competency framework.

The competency framework consists of more than 3000 competencies across the levels and behavioural competencies thus in order to speed up the process a set of natural language processing (NLP) algorithms were developed and deployed against the dataset.

The NLP algorithms were used to compare behavioural competencies to the course description, outcomes and overall information contained in the SAQA course records. Where there was significant overlap, the course was said to match the competency, only the top 5% matches were kept as candidates for the Mapping of Education for Health Supply Chains. Once the first pass with SAQA was completed, certificate courses were added to this list and assigned in a similar method, this had two effects, one was to expand the dataset and the other was to partially validate the model as these certificate courses are more focussed than the degrees from SAQA and thus these were easier to validate. The results of this validation were that less than 2% of allocations made for the certificate programme were judged to be erroneous.

At this point a candidate list was created including SAQA and various certificate courses, the full list of course sources can be found below. Finally, these courses were compared to the competencies that matched to them and removed where erroneous matched were observed which was observed to be less than 5%, finally validating the model and the final Mapping of Education for Health Supply Chains was finalised.

Courses are listed from:

- Coursera
- MIT
- edukazi.com
- South African Qualifications Authority — (All registered qualifications in South Africa)
- Empower
- CIPS
If you are a training provider, your courses may be included in this list by contacting PtD and supplying the requisite information for merge into this document in later revisions.

A lack of qualifications at a position represents a lack of a relevant qualification to fit that competency at that designation.

The qualification will increase in complexity as they move from one designation level to the next.

Each designation level has a set of qualifications that are associated with it that denotes the level and nature of a particular competence the individual must have in order to demonstrate that the individual has that competence.

E.g. In the Procurement Domain for the competency: Build and maintain supplier relationships, the Associate designation is recommended to have completed either a CIPS Level 2 certification or a skills program, while the Professional is recommended to have completed either CIPS Level 5, APICS CPIM- or a SPSM3 certificate to possess the competency required for the role at that designation. In this case the difference pertains to the outcomes of the qualification, with the Associate designated courses focusing on execution of the role while the Professional analysis and input into strategic decision making on an enterprise level.
A note on GHSC-PSM

GHSC-PSM recognizes that without a strong, skilled workforce at the national and local levels, system-based and technological improvements won’t have their intended effect. Achieving a well-performing, motivated workforce requires strengthening the organisational systems, processes, and environment in which supply chain workers perform their duties.

The GHSC-PSM vision is to foster self-sufficient organisations with institutionalized systems. This in turn will help ensure high performance from a professionalized and consumer-centred workforce for effective and efficient delivery of health commodities through to the last mile.

The project goes beyond basic capacity building to look at long-term solutions to organisational and people development, considering the development of human resources systems as an investment. We do this by providing technical support to continuously improve the systems, processes, and factors affecting an organisation’s ability to plan for, manage, and support professionalized national cadres of supply chain professionals.

A note on People that Deliver

With more than 250 organisational members globally, PtD advocates for interventions that improve the demand and supply of a qualified health supply chain professional in organisations, which in turn strengthens the individual practitioners within those organisations. Since 2011, PtD has contributed significantly to the human resources body of knowledge available for health supply chain practitioners. As custodians for the stepped-approach toolkit, which features the Competency Compendium for Health Supply Chain Management, PtD was an obvious partner in considering an SCM professional framework.

A note on SAPICS

SAPICS has taken the step to professionalize SCM in South Africa by taking on the role of the professional body for supply chain management. Having served the profession for 50 years, it is well positioned to provide the services of the professional body that will see it uplift supply chain management as a profession as well as the practices and people within it. It also assists in fostering relationships with government to assist in addressing strategic imperatives for economic transformation in South Africa and the continent of Africa more broadly. SAPICS awards professional designations based on technical supply chain competencies.
Overview

- Who we are
- Why do we focus on HR for SCM
- Meeting the needs of the future supply chain workforce
- Understanding labour markets
- Supply and demand
- SCM labor market analysis in Rwanda
- How to catalyse and stimulate the SCM labor market?
- Four components of the SCM professionalization framework
Why do we focus on HR for SCM?

- Fragmentation of the responsibility for managing the overall performance of the supply chain
- Lack of planning & financing for the supply chain workforce
- Lack of development & credentialing of supply chain managers
- Lack of professional development & professional association
- Lack of accurate job descriptions

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Increasing pressure on health supply chains

24-fold increase in the value of new vaccines introduced into a country...

... resulted in a 5-fold increase in the workload for supply chain management
Meeting the needs of the future supply chain workforce

Requires systems thinking!
Recognition that the SC workforce is more than warehouse clerks and managers, but includes regulatory & procurement functions, data analytics, strategic management and leadership.

Understanding SC labour markets
- The educational and training institutions that output qualified workers
- Policies and regulations that determine requirements of supply chain personnel and influence career paths
- Dynamics that influence movements of SC workers between organizations and between sectors
- Capacity development must occur at multiple levels: individual, organizational and societal

Across different sectors
- Public
- Commercial
- Civil Society

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Lack of professional status and performance

Health supply chains are a key enabler for increasing the availability of life-saving medicines and other health commodities. The challenge is to ensure enough professionals have the competencies required for effective SCM of health products.

**Current Paradigm**

1. Staff rotation / migration
2. Lack of Professional status & performance
3. Clinical Staff fill SC Position
4. Limited available resources and incentives
5. Short term training provided

**Desired Paradigm**

1. SC jobs desirable; qualifications sought
2. Elevated Status for the SC and SC workforce
3. High staff satisfaction
4. Qualified staff hired/contracted for SC positions
5. National institutions provide relevant qualifications

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Understanding labour markets

Supply
of a competent SCM workforce: employees

Demand
for a competent SCM workforce: employers

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Slide 7
The supply

Competency areas and behaviours
Knowledge, skills and abilities needed for the job

Paths to professionalisation
Professional development and academic accreditation
- Professional accreditation
- Short courses
- Academic accreditation
- Fill the knowledge gap

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SCM Competencies

People that deliver competency framework for health supply chain management

01 Staff rotation / migration
02 Product selection
03 Quantification and procurement
04 LMIS pipeline monitoring organisation and staffing budgeting supervision evaluation

EXAMPLE

<table>
<thead>
<tr>
<th>Competency</th>
<th>Behavioural competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Select the appropriate product</td>
<td>Describe the broad concepts of National Medication Policy, Essentials Medicine Lists, Essential Equipment Lists, Standard Treatment Guides and “Dangerous Drug” (DDA) or narcotics Policy</td>
</tr>
<tr>
<td></td>
<td>Use the processes required to add and subtract items from the Essential Medicines List and the Essential Equipment List</td>
</tr>
<tr>
<td></td>
<td>Follow the process required to alter standard treatment guidelines, dangerous drug policy and national medication policy</td>
</tr>
<tr>
<td></td>
<td>Confirm the type of supplies and services that are required</td>
</tr>
</tbody>
</table>

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The demand
Availability of qualified staff: geographical split

Emerging regions
Please indicate the availability of employee groups by country for the following four employee groups of your country.

Developed regions
Please indicate the availability of employee groups by country for the following four employee groups in your country.

* In emerging markets, main shortage is at the managerial level

* In developed countries, main shortage is at the operative level

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Slide 10
Benefits of professionalisation?

- Defined standard of competence for a set of tasks within the supply chain
- Improved supply chain management outcome
- Creation of a pool of correctly skilled workforce in private & public
- Scalable method of creating continuous flow of correctly skilled individuals
- Create a sense of identity & prestige
- Exponential improvement in supply chain management practices deployed in country

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SCM Professionalisation framework can be used by:

- Governments to define standards
- Employers to define competency needs
- Institutions of learning to define teaching
- Employees to map careers

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How to catalyse & stimulate the SCM labor market?

Mapping of Education for Health Supply Chains

Library of competencies and designations for health supply chains

Collection of roles and job descriptions for health supply chains

Implementation approach for health supply chains
Mapping of education for health supply chains

<table>
<thead>
<tr>
<th>Associate</th>
<th>Practitioner</th>
<th>Specialist</th>
<th>Professional</th>
<th>Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. Skills Programs</td>
<td>e.g. Diploma, Skills Programs</td>
<td>e.g. Bachelors Degree, APICCS CILT</td>
<td>e.g. Masters, High Degree, APICCS CSOP</td>
<td>e.g. Masters, PhD, APICCS CSOP</td>
</tr>
</tbody>
</table>

- Academic and professional education pathways that align with the suggested job roles and job descriptions.
- Job roles are aligned with a career path for SCM professionals that can be adopted by professional associations and/or professional councils.
- Shows clear education and career pathways for SCM professionals across the competency framework.
- Moving between "Plan" through "Return" and from "Associate" to "Leader".

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Mapping of education for health supply chains

Library of competencies and designations for health supply chains

- Forms the core of the SCM professionalisation framework
- Standard competencies that includes technical and managerial elements
- Includes a maturity approach as staff move from "Associate" to "Leader"

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Mapping of education for health supply chains

Collection of roles and job descriptions for health supply chains

- **Associate**: E.g. Clerk – Receiving
- **Practitioner**: E.g. Officer – Receiving
- **Specialist**: E.g. Manager – Logistics Planning
- **Professional**: E.g. Lead – Procurement
- **Leader**: E.g. Director – Public Health Supply Chain

- ✔️ Range of SC roles with associated job descriptions that spans the width of SCM competencies
- ✔️ Includes example organograms and job descriptions, including reference to key performance indicators
- ✔️ Aligned with the designations and career maturity (e.g., from associate to leader)
- ✔️ Aligned to the education and training

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Slide 16
Implementation approach for health supply chains

S5 Implementation and Monitor

5.1 Robust CDP
5.2 Demand for business as usual

S1 Advocacy

1.1 Pre-research
1.2 Stakeholder Analysis
1.3 One-on-one overview

Begin next approach

S4 Improve

4.1 Develop plan
4.2 Create personal development plans
4.4 Organization development summary

S3: HR4SCM building blocks

3.1 SC Process activity selection
3.2 Role alignment
3.3 HR requirements analysis
3.4 Role based competency assessment
3.5 SC & HR performance alignment

S2 Define scope

2.1 Complete preliminary reports
2.2 Introduction workshop
2.3 Define working groups
2.4 Implementation project charter

Implementation approach
A new approach to health SC workforce skills development

Capacity Development priorities
Training needs analysis (TNA)
Role Based Competency Assessment
Process aligned job descriptions
TOC & SC process & skill definitions

Stakeholder buy-in & process building

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Slide 17
Implementation approach for health supply chains

S1 Advocacy

S2 Define scope

S3 HR4SCM building blocks

S4 Improve

S5 Implementation and Monitor

Implementation approach
A new approach to health SC workforce skills development.

1.1 Pre-research
1.2 Stakeholder Analysis
1.3 One-on-one overview

Identify Environment
Identify Project team

2.1 Complete preliminary reports
2.2 Introduction workshop
2.3 Define Working Group
2.4 Implementation project change

4.1 Develop plan
4.2 Create personal development plans
4.3 Develop capacity development plan

5.1 Initial CDP
5.2 Detailed for training account

3.1 SC & HR Performance alignment
3.2 Role-based competency assessment
3.3 HR requirements Analysis
3.4 Role Alignment
3.5 SD Process activity selection

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Implementation approach for health supply chains

S1 Advocacy
- Identify Environment
- Identify Project Team

S2 Define scope
- Stakeholder Day in
- Kickoff Building
- Complete preliminary report
- Introduction workshop
- Define Working Groups
- Implementation project charter

S3: HR4SCM building blocks
- 3.1 Role alignment
- 3.2 Role alignment
- 3.3 HR requirements analysis
- 3.4 Role based competency assessment
- 3.5 HR & HR Performance evaluation

S4 Improve
- Develop personal development plans
- Create personal development plans
- Technical development program
- Technical development program
- Technical development program

S5 Implementation and Monitor
- Project framework
- Action planning report (APR)
- Project framework
- Project framework
- Project framework

S1 Pre-research
- 1.1 One-on-one overview
- 1.2 Stakeholder Analysis
- 1.3 One-on-one overview

CSC Professionalisation Framework

Slide 19
Implementation approach for health supply chains

S1 Advocacy
1.1 Pre-research
1.2 Stakeholder Analysis
1.3 One-on-one overview
Identify Environment
Identify Project team

S2 Define scope
2.1 Compile preliminary reports
2.2 Introduction workshop
2.3 Define Working Group
2.4 Implementation project charter

S3 HR4SCM building blocks
3.1 SC Process activity selection
3.2 Role Alignment
3.3 HR requirements Analysis
3.4 Role-based competency assessment
3.5 SC & HR Performance alignment

S4 Improve
4.1 Develop plan
4.2 Construct personal development plans
4.3 Capacity Development plan
4.4 Organization improvement summary

S5 Implementation and Monitor
5.1 Initial COP
5.2 Obtain for training account

Implementation approach
A new approach to health SC workforce skills development

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Supply chain process selection

Objectives
- Align current in country supply chain activities with competency framework
- Agree on champion organisation for professional body

Inputs
- Project Charter
- Organisation processes aligned to technology and practices
- Human resources assignments by process
- Job descriptions
- Organisational WSPs

Activities
- Gathering of process documentation from all organisations (link to documentation already collected)
- Gathering of human resource assignments
- Selection of processes from original scope defined in project charter
- Gather educational course data for health supply chain
- Gather professional association data and requirements looking for supply chain custodianship
- Evaluation of process elements for competency framework

Outputs
- Supply Chain Activity Selection Summary
- Process aligned suite of competency categories (what is in and what is out)
- Supply chain professional body agreement
Role Alignment

**Objectives**
- Translation of SCM process to role and alignment of roles to designations and careers paths

**Inputs**
- Supply chain activity selection summary
- Repository of job descriptions
- Library of competency’s (subset from previous step, what’s left in)
- Mapping of education

**Activities**
- Definition of designation competencies with qualification and professional credentialing
- Alignment of SCM process process to Repository of Job Descriptions
- Alignment of SCM job roles to designation level
- Alignment of additional designation requirements e.g. ethical, process for designation, public service commission, non-competency-based considerations (Authority of a designee)

**Outputs**
- Country specific designation framework and career paths
- Country specific repository of job descriptions with country specific serialisation

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HR Requirements analysis

**Objectives**
- Define gaps discovered through alignment of roles and competencies to processes

**Inputs**
- Country specific repository of job descriptions with country specific serialisation
- Current organisation organogram and associated job descriptions

**Activities**
- Comparison of current organisation organogram and associated job descriptions to new country specific repository of job descriptions
- Comparison of competencies in job descriptions to education availability
- Definition of total in-country qualification, professional credentialing offering gap
- Creation of competency-based assessments by job role

**Outputs**
- Overall qualification and professional credentialing development summary
- Mapping of current employees to new job roles
- Competency-based assessment tools (Observational, Quiz, Tests)
S3.4 Role based competency assessment

Objectives
- Roll out competency-based assessments and define competency gaps

Inputs
- Overall education development summary
- Mapping of employees to job roles
- Suite of competency-based assessments

Activities
- Assessment assignment and measurement
- Optimisation of educational requirements

Outputs
- Training needs report
### Supply chain human resources performance alignment

#### Objectives
- Define baseline metrics for individuals and supply chain performance based on selected KPIs

#### Inputs
- Last key performance indicator for individuals and supply chains
- Training needs report

#### Activities
- Analyse and document key supply chain performance indicators against training needs
- Compare KPIs to interventions identified in previous step and rank according to KPIs
- Develop capacity development priorities with individual and staff component
- Acquire approval for capacity development priorities with individual and staff component

#### Outputs
- Ranked initiatives for improvement based on educational, process and performance gaps in Capacity Development Priorities
- Signed off for capacity development plan with individual and staff component for approval to continue to step 4

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**Notes**
May require KPI definition and first measurement as part of process analysis
Implementation approach for health supply chains

S1 Advocacy
- Identify Environment
- Identify Project Team

S2 Define scope
- Compile preliminary reports
- Introduction workshop
- Define Working Groups
- Implementation project charter

S3: HR4SCM building blocks
- 3.1 BC & HR Performance alignment
- 3.2 Role, Alignment
- 3.3 Role, Requirements Analysis
- 3.4 Role, Based competency assessment
- 3.5 Role, Process activity selection

S4 Improve
- Create personal development plans
- Develop plans

S5 Implementation and Monitor
- Organization improvement summary
- Develop capacity Development Framework

Implementation approach
A new approach to health SC workforce skills development

S1 Pre-research
- One-on-one overview
- Stakeholder Analysis
- Relevant environment

Slide 26
Develop professionalisation plan

**Objectives**
- To develop the project plan for professionalisation including designation, education and mentorship

**Inputs**
- Capacity development priorities
- Designation requirements

**Activities**
- Develop plans based on optimisation quantifying the number and potential time horizon of interventions
- Develop professional council activities
- Develop organisation activities
- Develop country activities
- Develop academic activities
- Engage with professional bodies to assist in professionalisation activities

**Outputs**
- Professionalisation plan
Create personal development plans

**Objectives**
- Creation of personal development plans from capacity development plan

**Inputs**
- Capacity development portfolio
- Professionalisation plan
- Succession planning initiatives
- Performance management initiatives
- Available education and training

**Activities**
- Review role-based recommendation from capacity development plan including cpd requirements
- Analyse individual recommendation from capacity development plan including cpd requirements
- Individual conversations based on hr recommendation from capacity development plan
- Develop individual plans and get buy in from employee

**Outputs**
- Personal development plans

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S4.3 Develop Capacity Development Plan

Objectives
» To quantify and plan organisation-wide education and designation activities and balance to available resources

Inputs
» Professionalisation Plan
» Professional Development Plan
» Funding and Budgets Available

Activities
» Prepare schedule of groups of employees against professionalisation plan and PDPs
» Prepare Costing for proposed interventions
» Balance interventions against funding and budgetary constraints

Outputs
» Organisation Organisational Capacity Development Plan for all included organisations
Organisational improvement summary

Objectives
- Linking professionalisation with intended organisational performance for the executive. Embedding professionalisation into the DNA of the organisation
- To get confirmed buy-in from the executive with required resources to progress the plan

Inputs
- Professionalisation plan
- Organisation capacity development plan

Activities
- Quantify costs for professionalisation
- Qualify benefits to professionalisation and position it in the larger HR landscape (theory of change)
- Perform advocacy for ongoing professional development
- Ensure appropriate positioning of professionalisation in line with other strategic interventions
- Seek sign off for organisation capacity development plan

Outputs
- Benefits summary
- Signed off organisation capacity development plan for permission to enter step 5
Implementation approach for health supply chains

S1: Advocacy
- Pre-research
- Identify Environment
- Identify Stakeholder Engagement
- One-on-one overview

S2: Define scope
- Complete preliminary reports
- Define Workflows
- Define Working Group
- Implement first draft charter

S3: HR4SCM building blocks
- HR requirements Analysis
- Role Alignment
- SC Process activity selection

S4: Improve
- Create personal development plans
- Develop plans
- Capacity development prioritization
- Training needs analysis (TNA)
- Role Based Competency Assessment
- Process aligned job descriptions
- TOC & SC process & Skill definition

S5: Implementation and Monitor
- CDP Rollout
- Actual Training Report (ATR)
- Identity Environment
- Identify Project Team
- Stakeholder buy-in
- Risk process building

Implementation approach
A new approach to health SC work force skills development

Slide 31
S5.1 Organisational Improvement Summary

**Objectives**
- Roll-out approved organisational capacity development plan

**Inputs**
- Approved benefit summary
- Approved organisational capacity development plan
- Approved professionalisation plan

**Activities**
- Trigger planned interventions
- Manage planned interventions

**Outputs**
- Actual training report (on-going)
- Sc kpi reporting (on-going)
S5.2 Onboard for business as usual

**Objectives**
- Integrate and create formal structures to manage the ongoing professionalisation

**Inputs**
- SC KPI Tracking Reports
- Actual Training Reports
- Improvement Portfolio

**Activities**
- Analyse total benefit
- Define on-going structures
- Begin process for review of Project Charter
- Begin process for review Country Specific Job Descriptions
- Begin process for review Country Specific Designation Framework
- Begin process for review Country Specific Education
- Acquire sign off for Step 1

**Outputs**
- Adjusted plans based on new realities and sign-off for step 1

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Role alignment

Sponsor  In-Country Representative  Coach  Working groups

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Questions?