



Human Resource Development in Supply Chain Management of Health Commodities -

A realist review of UN sources

An activity of The People that Deliver Initiative

August 2014

Contents

Contents	2
Authors	3
Acronyms	3
Executive Summary	4
Introduction	5
Background.....	5
Purpose.....	5
Aim/ Research Question.....	5
Method Description.....	6
Results	7
Theme one - Stakeholder engagement and collaboration.....	8
Theme two - Policy making and implementation	10
Theme three- Workforce development	12
Theme four - Performance Management	14
Theme five - Professionalization	15
Discussion	16
Research Gaps/ Limitations	18
Conclusion	18
References	19
Appendices	21
Appendix 1 Key word list.....	21
Appendix 2 Detailed document inclusions for theme one ‘stakeholder engagement’.....	24
Appendix 3 Detailed document inclusions for theme two ‘optimize policies and plans, summary of included documents’	35
Appendix 3 Detailed document inclusions for theme three ‘workforce development’	46
Appendix 5 Detailed document inclusions for theme four ‘increased performance’	58
Appendix 6 Detail document inclusions for theme five ‘Professionalization’	61

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Acronyms

HRH	Human Resources for Health
SCM	Supply Chain Management
UN	United Nations
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
PtD	People that Deliver
WHO	World Health Organization
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
GAVI	Global Alliance for Vaccines and Immunization
MDG	Millennium Development Goals

Executive Summary

The global Human Resources (HR) crisis poses a major problem for the efficient delivery of health commodities via a sound supply chain network. In order to meet the United Nations 'Millennium Development Goals' and to ensure universal and equitable access to medicines, there is an urgent need to address this issue. An efficient, well trained, competent and motivated health workforce, and sufficient support from other enabling cadres, including health supply chain professionals are needed to sustain and accelerate progress on universal health coverage.

UN organizations such as UNICEF, WHO and UNFPA, have been trying to address the issue of developing human resources to support the vision of universal health coverage into improved healthcare. A pool of literature has been published in the past few years by these organizations, which describes the need and urgency to address the health workforce crisis. Keeping this in mind, the People that Deliver (PtD) Initiative was established in 2011, with now over 80 collaborating partners focusing on planning, financing, developing and supporting the human resources required for national health supply chain networks. Before this review there has not been a systematic presentation of what this publicly available literature articulates concerning issues regarding human resources in health supply chains. The purpose of this realist review was to systematically review this information through a process of document search and thematic analysis.

A total of 707 documents from the websites of UNICEF, UNFPA, WHO and PtD were reviewed and 128 documents were thematically analysed.

Five key themes emerged from this review:

- **Stake holder engagement and collaborations,**
- **Policy making and implementation,**
- **Workforce development,**
- **Performance management and**
- **Professionalization.**

Strengthening human resources in health supply chains requires attention in these five parameters which has been made clear by their consistent occurrence in the reviewed documents for this report. The research conducted for this report calls for more attention to be given to HR development in supply chain management of health commodities.

Introduction

Background

The World Health Organization estimates a shortfall of over 12.9 million health workers by the year 2035 while 1/3 of the world's population lack access to essential medicines (1). A key factor in order to attain, sustain and accelerate progress on universal health coverage is the development of human resources, particularly in health supply chains (2). Personnel involved in health supply chains need to be trained, retained and sufficiently resourced so that the health commodities reach the 'last mile', to the end consumer in need. Ensuring equitable access remains a problem due to the uneven distribution of well trained and qualified health workforce rendering the poor and marginable people devoid of an effective package of health services (3). Hence, transformative action on human resources engaged in the delivery of health services is required.

The United Nations have a set of Millennium Development Goals (MDGs) of which three goals have a direct relation to health; Reducing child mortality, improving maternal health and combating HIV/AIDS, malaria and tuberculosis (4). A shortage of health workers poses serious constraints to achieving these goals. In order to bridge this gap, currently 4 million health workers are required and 1.5 million in Africa alone (1). For successfully achieving the MDGs, it is essential that the right medicine is made available to the right people, by the right people at the right time. This explains the need for a well-trained and competent workforce, engaged in health supply chains.

In order to address this problem, UN organizations have a special interest in development of human resources for health. This is evident from the volume of resources available in their publicly available websites addressing the same.

People that Deliver is a global Initiative that leverages a number of national and international organizations for the cause of human resource development in supply chain management of health commodities. Its main aim is to implement evidence based plans that help to strengthen the health supply chain and help to develop, finance and manage the workforce required to run them (5).

The importance of HR in SCM has been identified by a number of partners, however, a systematic analysis of publicly available reports and publications on this theme does not exist.

Purpose

Although a large amount of information is available from web based documents from UN organizations, there is no single synthesis document that exists which completely defines and addresses the problem of human resources in health supply chains. In addition, there are only a limited number of peer reviewed articles available on this topic. For these reasons a realist review was undertaken.

Aim/ Research Question

The aim of this realist review is to collect and analyse literature published in publicly available websites of the following UN organizations; UNICEF, WHO and UNFPA as well as People that Deliver Initiative, in relation to human resources in health supply chain management.

Method Description

This research used a systematic realist review approach. A systematic review is a form of qualitative research which focuses on one research question and builds upon collecting evidence supporting that question (6). It aims to provide an exhaustive summary of all the common themes that come out of the literature available revolving the research question. A realist review provides explanation aimed at discerning what works for whom, in what circumstances and in what respect. The final outcome of a realist review is more explanatory than judgemental (7,8,9).

A strict inclusion and exclusion criteria was formulated for the purpose of this review. Only publicly available, web based, documents in English, published during the time period of 2000 to March 2014, were included. Literature released from other global organizations such as U.S Agency for International Development (USAID), John Snow Inc. (JSI), Management Sciences for Health (MSH) etc. were excluded.

In a realist review the context of the documents is of importance. The documents included were classified on three parameters, i.e. three contexts:

1. Nature of the documents - whether it was a report, guideline or tool
2. Disease/commodity specific
3. Region specific - country/global/ regional specific.

The literature was then screened using three filters, namely; title screening, executive summary screening and full document screening.

Systematic reviews require substantial resources in excess of what the researcher may be able to commit. Hence, an effective method to reduce time and cost of undertaking the review, without compromising on its quality is to screen the documents by their titles (10). The researcher must have adequate knowledge about the subject area and must be able to decipher the content of the literature via its title and subtitle and be able to include or exclude them. Extensive background reading was done on this topic that led to the generation of a key word list which gave the required understanding for a title search to be conducted (see Appendix 1).

The included documents were collected and their executive summaries were read which further filtered relevant documents followed by complete document screening for inclusion of all relevant literature. These were then subjected to manual thematic analysis (11), where common themes were coded and extracted that gave rise to five major themes. This coding was reviewed by a second researcher.

Results

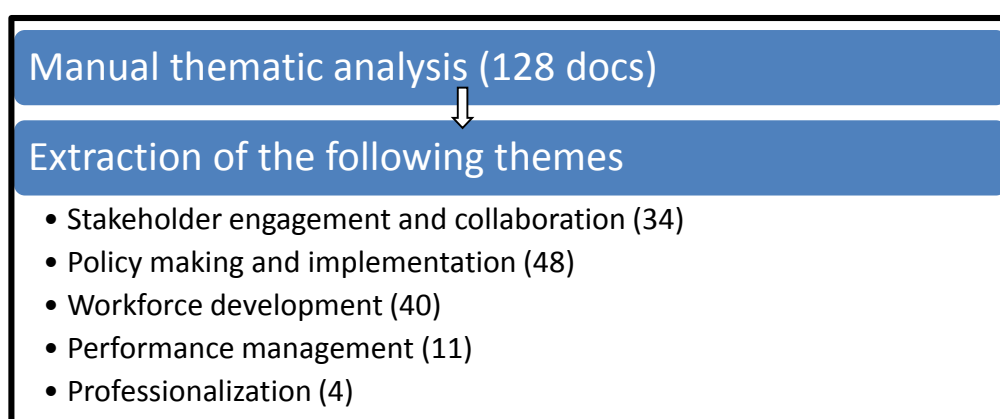


Figure 1: Realist methodology flow chart

The publicly available documents in the websites of WHO, UNFPA, UNICEF and PtD are the main documents targeted in this review. A total of 707 titles were screened in accordance to relevance of which 379 documents were included. These documents were then subjected to executive summary screening, post which, 182 documents were included. The next step was screening the entire document which rendered a total of 128 documents which were further thematically analysed.

Thematic analysis lead to extracting the following 5 themes as identified in Table 2.

Building Block	Number of Documents
Engage Stakeholders	34
Optimize Policies and Plans	48
Workforce Development	40
Increase Performance	11
Professionalize SCM	4

Note: The total number of documents in the above table are more than the total number of documents included in this review as many documents suggested more than one theme.

Table 1: Number of documents suggesting each theme

Number of documents Included					
Organization	WHO	UNFPA	UNICEF	PtD	Total
Total	508	151	34	14	707
Title screening	298/508	41/151	27/34	13/14	379
Executive Summary Screening	131/298	28/41	10/27	13/13	182
Full document Screening	87/131	25/28	08/10	8/13	128

Table 2: Figures indicate number of documents included at each stage of screening

Theme one - Stakeholder engagement and collaboration

Of the 128 documents that were included in the review after full document screening, 34 documents indicated the need and advantages of engaging stakeholders and their importance in a proficient supply chain. Appendix 2 of this report details these 34 documents. The subthemes derived are illustrated in the figure below:

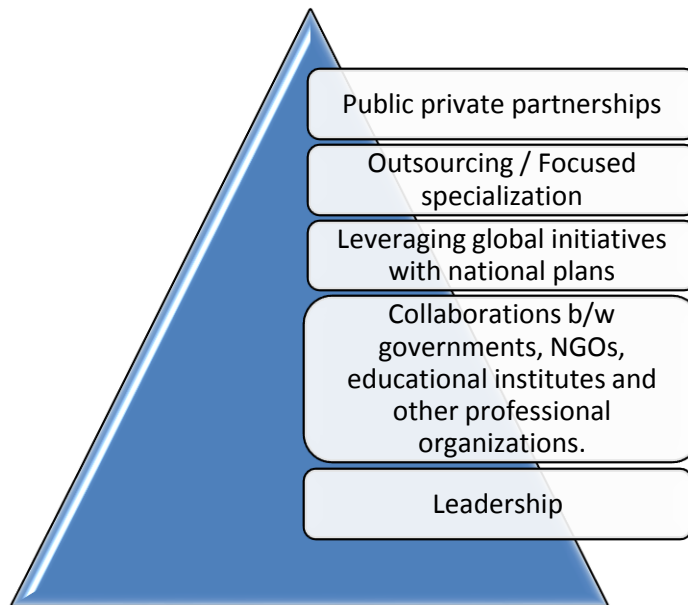


Figure 2: Subthemes under the main theme of stakeholder engagement and collaborations

Public private partnerships:

These documents suggest that a framework should be established to assist stakeholders to work together to provide unified attention on the need to address the issue of HR crisis in health. For this purpose, inter professional collaborations are important. Leveraging private and public resources is critical to improve global health, as it allows for integration of skills and expertise (12).

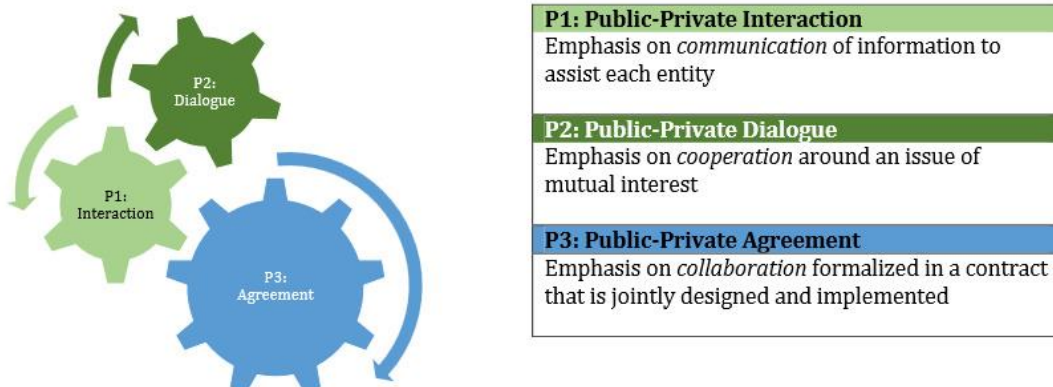


Figure 3 UNFPA P3 Model for Private Sector Engagement

The Kampala Declaration, 2008, recognized the need to resolve the accelerating crisis in the global health workforce and calls upon governments, civil society, private sector and professional organizations to strengthen leadership and to institute coordinated policies by engaging in public private partnerships (13).

Outsourcing and focused specialization:

By transferring specified portfolios to the private sector, the government can better focus on defining policies and provide high quality services. With the help of experts from the private sector, there can be an improved access to medicines by using their expert knowledge on medicine distribution (14).

Government collaborations:

The planning, implementation and monitoring of national health services can effectively take place when there is sufficient communication and cooperation within the various ministries of the government. For example, the Ministry of Health, Education, Planning, Rural development etc must come together and plan curriculums and open humanitarian logistics education services to have improved efficiency and impact. Leveraging with other professional organizations such as NGOs, pharmaceutical companies and donor communities can enable increased sustainability and promote innovation (15).

Opportunities may exist to improve distribution through public-private partnerships or by outsourcing select functions to private sector, but this will require strong institutional contracting capacity within the ministries of health -The World Medicines Situation 2011

International partners have a key role in supporting country led strategies to reform and facilitate the engagement of stakeholders. Global initiatives should be combined with national level health programs in order to get widespread reach and full promotion and execution of the initiative. The stakeholders must commit to enhance collaborations towards efficient use of resources, increased accountability and work collectively towards the vision of an improved healthcare system (16).

Leadership:

Leadership and commitment to action is another important factor for better health outcomes. Each player in the supply chain must commit to their responsibilities and promoting synergy between each other's differential strengths so that each can lead in their area of expertise, thus ensuring better health outcomes (17).

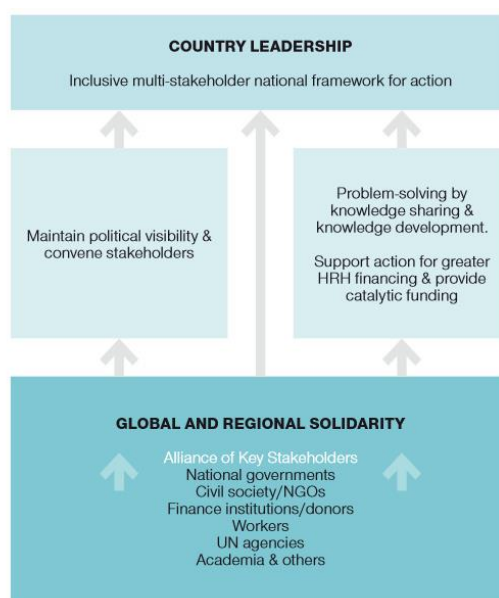


Figure 4: Goals of the Global Health Workforce Alliance (GHWA) (18)

Theme two - Policy making and implementation

The highest number of documents, 48 documents from the review, suggested the need to optimize policies and plans for a better health supply chain outcome. Appendix 3 of this report details the 48 documents. Five sub themes were identified, Figure 5.

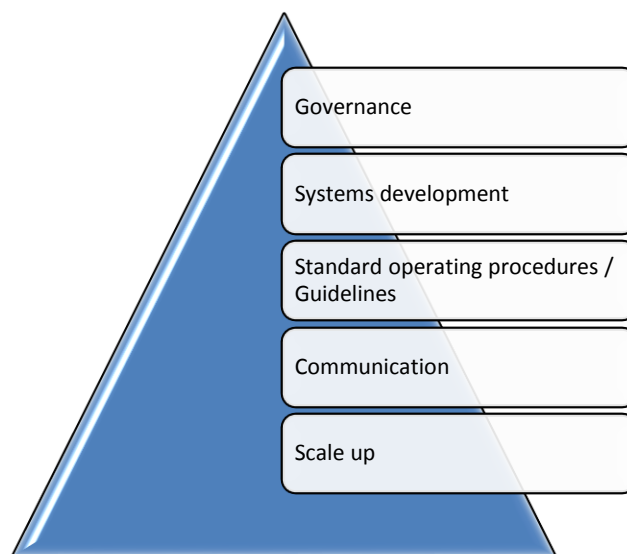


Figure 5: Subthemes under policy making and implementation

Effective planning is essential for addressing the human resource needs and hence countries are encouraged to develop and implement evidence based comprehensive HRH policies and plans involving all partners and stakeholders. Budget and resource mobilization, management tools, monitoring and evaluation and a far reaching advocacy and policy change is required for successful prevention of communicable diseases and thus attaining the millennium development goals. There is a need for stronger national level capacity building in all countries to collect, collate and share data to facilitate policy making, planning and management.

Governance:

Governance practices involves national level policy making and implementation. This involves inclusion of certain important medicines to the essential medicines list of the state, consideration of a central policy that mandates universal new born vaccination, vaccination and immunization policies, etc. (19).

Systems development:

"The administrative burden of health workers can be reduced by automating time consuming tasks by systems development." (20)

Systems development includes promotion of an integrated supply chain system using a computerized logistics and information management that can help increase efficiency and performance. A human resource management system (HRMS), when in place can help to save time and resources for engagement of the correct professionals in the supply chain with due respect to their qualification and competencies. A logistics management information system (LMIS) can help reduce the time spent by the health personnel in inventory control, distribution, procurement etc. and will enable them to focus on other portfolios that require their expertise. Immunization information systems must be set up to help health workers plan and manage immunization activities. Training human resources in systems development and database administration and defining a health information policy is a major target area in human resource development.

In order to achieve state-of-the-art supply systems, the collaborative project by WHO and PATH, ‘Project Optimize’ suggests the inculcation of a computerized information system which can be adapted to different contexts, programs and can be changed as time demands. These systems can help health staff plan and manage resources such that demands are always met. This step can help in achieving the “Vision 2020” of enabling delivery of health products at the right time, right place, in the right quantities in the right condition, at the right cost (21).

Standard operating procedures (SOPs) and communication:

For the proper functioning of health systems, including medical supply systems it is necessary that the roles and responsibilities of each of the key players are clearly defined. Policies must be developed in a methodical fashion which clearly states the tasks and specific roles with a specific set of SOPs. An effective communication plan, both horizontal and vertical, needs to be set in place to avoid misunderstandings within the system (22).

Scale up and resource mobilization:

Transformative scale up of the health system is necessary to meet the needs of individuals in an equitable fashion. To ensure the long term sustainability of HRH scale up involves resource mobilization within the internal system with external resources filling the gap. International aid must be complemented within the national economic framework for an improved cost effective health system.

As an effort to increase the numbers of health professionals and to strengthen their impact on population health, the WHO’s document on "Transformative scale up of health professional education" states that,

“Scaling up educational programmes to produce more doctors, nurses, midwives and other professionals is clearly urgent and essential. However, increasing the number of graduates is not enough. The shortage of professional health workers is compounded by the fact that their skills, competencies, clinical experience and expectations are often poorly suited to the health needs of the population they serve. Driven and informed by population needs, transformative scale up means delivering educational reforms that address not only the quantity but also the quality and relevance of health care providers to achieve improvements in population health outcomes”. (23)

Theme three- Workforce development

Out of the 128 included in this review, 40 documents suggest workforce development as the key parameter towards human resource development. Appendix 4 details the 40 documents. Three sub themes were identified, Figure 4.

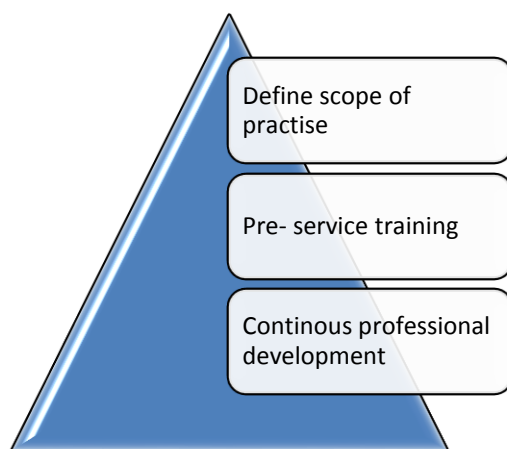


Figure 6: Subthemes under workforce development

According to the World health report 2000, the performance of health care systems depends ultimately on knowledge, skills and motivation of people responsible for delivering services. Thus developing a capable, motivated, and supported health workers is essential for overcoming bottlenecks to achieve national and global health goals (24).

The Global Health Workforce Alliance (GHWA) is a global platform that commits to a strategy in order to meet the global health workforce crisis. It identifies the main challenges in HRH as being; insufficient staff planning, the unsuitability of training with regard to needs, a lack of framework for coordination among those who train and those who employ health personnel leading to low staff productivity, brain drain, and poor motivation. The GHWA strategy seeks to improve education, training, recruitment and deployment policies in order to develop a workforce that is adequate, competent and motivated (15).

"Human resources are the backbone of health systems, but if crucial bottlenecks are not addressed it will not be possible to achieve the MDGs. Only 15 out of 68 countries that account for over 90% of maternal and child deaths meet the critical threshold of 23 physicians, nurses and midwives per 10000 people considered necessary to deliver essential health services." -Every Woman, Every Child- Access for all to skilled, motivated, and supported health workers, WHO (25)

Defining scope of practise:

Job descriptions for each cadre of health professionals must be clearly defined. At times, the definitions go much broader than initially designed and tasks overlap between two different levels due to the critical shortage of health workers and inadequate designing of competency based programs that would clearly define roles of each key player (26).

Pre service training:

It is essential that the existing health workers at all cadre levels are well trained and that they are given an adequate mix of skills during pre-service training. A strategic plan must be implemented which aims to review curricula in pre service training like developing post graduate training program (27).

"Action is needed in relation to salaries and incentives, investments in pre- and in- service training, adjustment of staffing and migration of health professionals" (18)

Continuous professional development:

Enhancing the quality of the health workforce is essential in terms of implementation of a successful intervention where coordinated planning is a pre requisite. Career progression mechanisms must be in place with an added focus on in service training which should be standardized and nationally endorsed (3).

"Almost 60 countries face critical shortages of health workers that they cannot provide basic healthcare to all. The time has come to focus on supporting and retaining the true lifesavers in every nation. This health workforce crisis requires that different stakeholders take action in a range of areas: migration, development education, finance and more. There are no neat and simple solutions." Ban Ki-Moon, United Nations Secretary-General at the First Global Forum on Human Resources for Health, March 2008.

Theme four - Performance Management

Eleven documents of the 128 included in this review suggests strategies to increase performance as a parameter towards human resource development. Appendix 5 details the 11 documents. Three sub themes were identified, Figure 5.

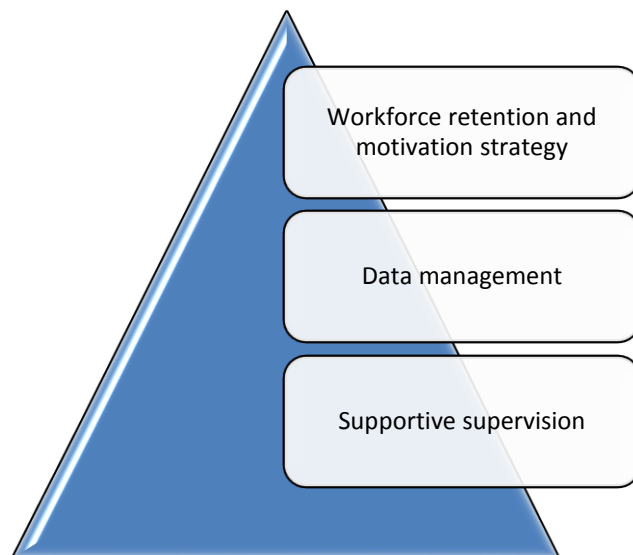


Figure 7: Subthemes under performance management

Retention Strategies:

In order to retain health workers, retention strategies need to be developed and implemented. This can be done by means of implementing a bonding mechanism, a minimum duration of time in exchange of scholarships, monetary incentives, regular and sustainable remuneration stipend, manageable workload, encouragement etc. Health workers must be motivated with incentives for job offers and career advancement strategies must be endorsed among all government and affiliated universities and must be endorsed (28).

Data Management:

Human resources data should be recorded and stored in a fashion to enable easy access of data regarding health workers for routine planning. Policies for recruitment must be clearly defined and approved at the central level, so that each level of the supply chain recruits appropriate professionals.

Supportive supervision:

These sub theme includes mechanisms that encourage the uptake of national standards to strengthen monitoring systems for personnel. Monitoring of interventions should be undertaken from time to time and must involve conducting situational capacity analysis and develop indicators and tools for the same (26).

Theme five - Professionalization

Four documents of the 128 included in this review talk about professionalizing human resources within the supply chain. Appendix 6 details the four documents. The very fact that only few documents relate to this topic itself suggests that more work needs to be done in this area. Three sub themes were identified, Figure 6.

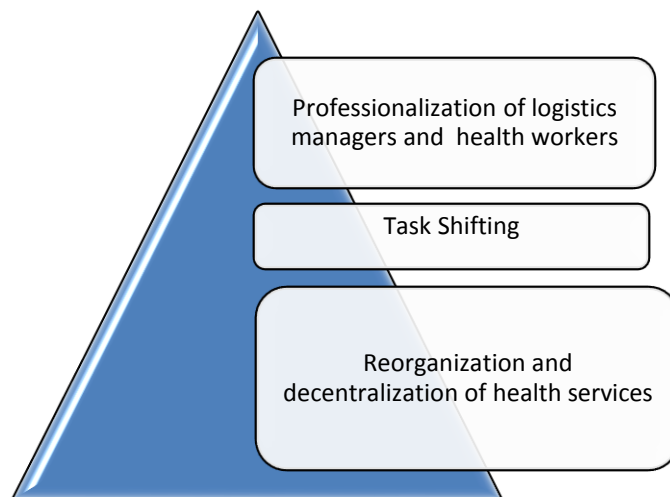


Figure 8: Subthemes under professionalization

Professionalization of logistics managers and health workers:

The personnel in health supply chain requires increased professionalization in terms of training and harmonization of practises at each level. A network of supply chain professionals with broad and highly specialized expertise needs to be developed for a fully sustainable supply chain. Each cadre of health worker at every step until the last mile of the supply chain must be trained adequately such that only experts would deliver their task in a professional fashion (29).

Task shifting:

Task shifting is a practical approach which makes the most of the resources in the country. The WHO defines task shifting as "The rational redistribution of tasks among health workforce teams where specific tasks are moved, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications." Task shifting programs must include processes and activities that define and improve quality of services provided by health workers (30).

Margaret Chan, director general of the WHO, says she sees task shifting as *"the vanguard for the renaissance of primary health care"*. Task Shifting- Global Recommendations and guidelines (30).

Reorganization and decentralization of health services:

Reorganization and decentralization of health services by task shifting can help address the current HRH crisis if implemented alongside a broad range of other strategies (31).

"Human resource constraints are impeding progress towards realization of MDGs hence it is important to recognize that reorganization and decentralization of health services including task shifting can help address the current shortage of health workers" (30).

Discussion

This review is the first to analyse UN reports containing information relevant to HR for SCM. The main themes generated by this review represent five interrelated parameters essential for sustainable HR approaches, as part of a comprehensive approach to health supply chain strengthening.

Despite knowing the importance of human resource development, limited attention has been given to adequately develop this area in the past. As noted in this review, the UN's main focus, has been restricted to HR policy development, development of workforce, health worker motivation and retention, while personal management and professionalization have been given limited focus. This may be partially due to the nature of the complexity of these parameters or demonstrate a sequential priority for these parameters where policy and workforce development provide an enabling environment from which to extend the less noted parameters of personal management and professionalization. This interrelationship is supported by the HR for SCM framework published by USAID|DELIVER and the Health Action Framework published by Capacity Plus as seen below.

The USAID Action framework considers human resources as a key performance driver within supply chains. It states the proactive management of plans and procedures with people and organizations can enable a sustainable a supply chain. It gives the five major building blocks that needs to be strengthened for effective HR development. This model supports the five themes generated by this review (32).



CapacityPlus framework adapted by USAID | DELIVER PROJECT

Figure 9 : The USAID|DELIVER Action Framework for Human Resource Capacity Development in Public Health Supply Chain Management

The CapacityPlus “Technical Brief 12” gives a national health supply chain strengthening framework that depicts an approach to planning, developing and managing a health workforce. These include strategies which match the themes generated from this review thus ascertaining their relevance and importance (33).

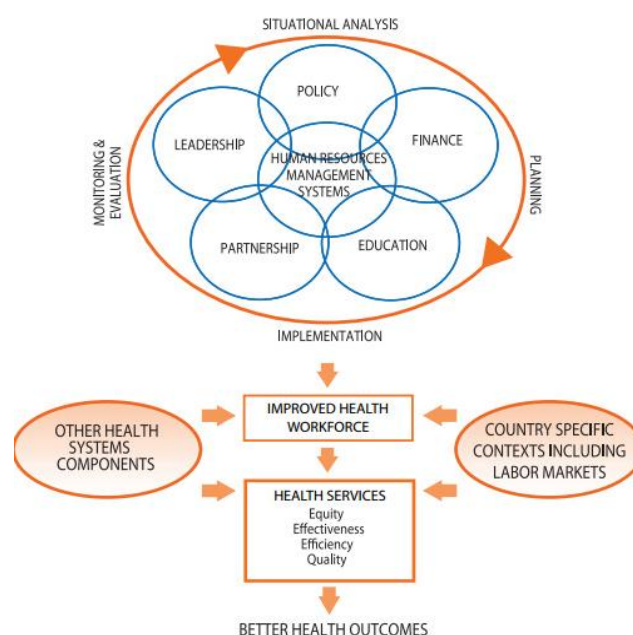


Figure 10: Capacity Plus Technical Brief 12- HRH Framework

The Potter and Brough model of capacity development is illustrated below. It indicates that capacity development is a complex process and requires interventions to be applied at each level of the pyramid. The focus of this review has been in HR, a key cross cutting theme through the capacity development pyramid. It should be noted that for health supply chains to be sustainable a focus is also required on the other inputs, namely; equipment, infrastructure and system design. Such a comprehensive approach can only be achieved through systematic planning of these interrelated components, with consideration given to all levels of the health supply chain (34).

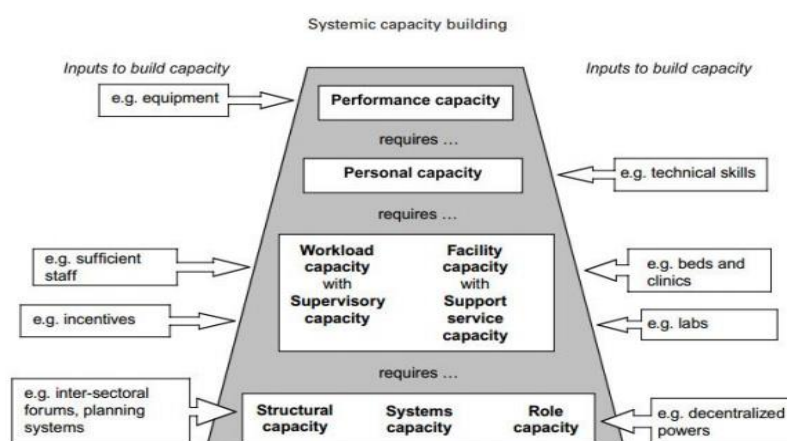


Figure 11: Systematic capacity building: A hierarchy of needs, Potter and Brough

The GAVI Supply Chain Strategy 2014, is one of the first internationally developed strategies that articulates these complex interrelationships with associated targeted interventions. Specifically, the strategy acknowledges system design, data management, equipment, and human resources as key factors that require simultaneous interventions for sustained progress in health supply chains in low income contexts (35). The GAVI Supply Chain strategy places further importance on human resources in the context of other supply chain elements for sustainable development.

Research Gaps/ Limitations

As this research was conducted in a fixed timeframe, 2000 to 2014, literature relevant to this topic published before 2000 is not included. Due to the more recent interest in this topic and focus by the UN agencies the existence of significant early material would be unlikely by the authors.

Title screening is a proven method for reviews and has been found to be as effective as full abstract screening in certain subject areas. Human resources for health is not an area where this method has been proven and as such the use of this method in this research may have resulted in certain reports being excluded from the review (10). This risk was reduced by sensitising the researchers to the field through conducting an initial trial of the method.

Considering that this is a realist review, the context of the research is of importance. The contexts used were country specific and disease/commodity specific. Of the total 128 documents included in this review, 29 documents were country specific papers and 12 papers were disease specific. These documents were produced with certain lenses considering the social, economic and political situation of countries. Hence they were derived for different circumstances. It is important to balance this limitation and consider that one or more of the themes that were generated from these context specific documents matched one another.

Other global organizations like U.S Agency for International Development (USAID), John Snow Inc. (JSI), CapacityPlus, USAID|DELIVER Project, Supply Chain Management Systems (SCMS), Leadership Management and Governance (LMG) and IntraHealth International have taken special interest in addressing this issue of human resources in supply chain management. However, for this review UN agencies were the focus. The researchers are currently working with USAID to prepare a realist review of HR in SCM of USAID funding HR and SCM projects.

Conclusion

From the volume of literature found in this review it is evident that the UN Agencies recognize the need for human resources strengthening. The five themes revealed in this review form the core basis of human resource development in SCM and are supported by previous work conducted by USAID|DELIVER and CapacityPlus. The weight of documents in this review clearly shows that the focus of human resource development has been in the areas of policy making and workforce development, while more attention needs to be given to the theme of professionalization. A focus on HR within SCM is one of a number of interrelated factors that need to be systematically addressed for sustainable health supply chains to be a reality in low income environments, but it is often the factor receiving the least attention. It is hoped that the evidence synthesised in this review will further encourage systematic country approaches to HR for SCM, with PtD acting as a key initiative offering its support.

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Appendices

Appendix 1 Key word list

General

Supply chain

Supply process

Health/ medical

Commodity/ product

Public health SC Profile

Advocacy tool kit/materials/
parameters

Utilization of supply chain

Supply and demand networks

Operations management

Logistics

Procurement

Medicine access

Service delivery

Engage Stakeholders

Build powerful constituencies

MoH

Donor Agencies

NGO

Labour organizations

Financial institutions

Partnerships

Administrator

Stakeholder engagement

Leadership

Governance

Advocacy

National/ Regional level

Optimize Policies and plans

Standard operating procedures

Human Resource information System (HRIS)

Outsourcing

Workforce planning

Allocation of Resources

Budget allocation

succession planning

Strategic plan

Operational Plan

Planning mechanism

Pay scale

Timeline

Guidelines

Bottle necks	Government officials	Organizational Structures
Barriers	Health/ Manpower/ health personnel	Utilization
Assessments	Guide and inform SC related policies and funding decisions	Improve utilization at service delivery points
Stock outs	Commodity security stakeholder group	Logistics management info system (LMIS)
Service delivery	Empower development	Inventory control system (ICS)
Immunization		Organizational charts/ organizational unit
Vaccines		Resource mobilization
Supply/ network/ link		South to South learning
Human Resources		Systematic HR Planning
Human Capital		Warehouse management
		Optimize distribution
		HR policies
		Recruiting policies
		Centralized working group
		Competency Framework
		Competency Model

Workforce Development

Recruitment/ deploy

Competency modelling

Trained staff

Performance management

Pre service/ in service education

Training/ Coaching

Workforce Retention

Turnover rate in SC positions

Data management proficiency

Planning and recruiting appropriate workforce

Labour optimization

Robust workforce

Cold chain supply chain

Performance standard

Health workers- technical expertise

Increase Performance

Monitoring/ Coaching/ Task shifting

Data management

Service delivery

Mentoring

Supportive supervision

Staff development

Retention Strategy

Logistics

Professionalize SCM

Set of competencies/ responsibilities

Commodity security

Logistics information portal

Profession specific

Minimum Competency standards

Minimum competency education

Registration regulation

Quality of work

come/ meeting together for common cause

Commodity management

Supply chain licence/ certificate

Appendix 2 Detailed document inclusions for theme one 'stakeholder engagement'

Theme one : Stakeholder engagement, summary of included documents

Sr No	Organization	Title	Key Message	Context	URL
1	WHO	OPTIMIZE Tunisia Report	Implementation of any intervention requires fundamental change in the system and in the roles and responsibilities of each stakeholder involved. This may be time consuming and difficult to initiate but is an important step in effective vaccine supply chain system. Conducting a stakeholder mapping exercise before beginning discussions could be beneficial in identifying and understanding key positions, concerns and tensions.	Country Specific : Tunisia	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/optimize_tunisia_report.pdf?ua=1
2	UNFPA	UNAIDS Action Framework	The UNAIDS framework assists stakeholders to get together and focus attention on identifying and promoting rights and evidence based actions needed to address policy gaps. Action area 1 gives guidance to strengthen support to national stakeholders to 'know their epidemic and response' in gender terms to meet the need of girls and women	HIV	http://www.unfpa.org/public/home/publications/pid/6875

3	UNFPA	HUMAN RESOURCES FOR HEALTH STRATEGIC PLAN (Rwanda, Tanzania, Nepal)	Strong partnerships is required from various ministries in order to set up training for post graduate medical workers among others, to ensure their accreditation by internationally recognized institutes	Country Specific : Rwanda	http://www.unfpa.org/sowmy/resources/docs/library/R151_MOHRwanda_2006_HRH_strategicplan_2006-2010.pdf
4	WHO	PATH's Guiding Principles for Achieving Programmatic Impact	PATH establishes and joins strategic alliances to create synergy through collaboration, managing alliances, managing partnerships and exploring new ways of collaborating and to leverage public and private resources to improve global health.	General	http://www.path.org/publications/files/ER_gp_impact.pdf
5	WHO	Nursing and midwifery capacity to contribute to health system strengthening and the achievement of MDGs: report of the 13th meeting, Geneva, 18-19 March 2010	In the context of Human resources for health crisis, inter professional collaborations can have an impact as it allows collaborative education and can produce readily collaborative human resources for health for better outcomes.	General	http://apps.who.int/iris/handle/10665/70623
6	WHO	Scaling up the capacity of nursing and midwifery services to contribute to the achievement of the MDGs: report of the 11th meeting	Objectives : to identify the scope and function of partners involved, design a framework for successful partnerships, develop a database of stakeholders and partners at all levels, enable and enhance communication and partners involvement.	General	http://apps.who.int/iris/handle/10665/70629

7	WHO	Transformative scale up of health professional education	International partners have a key role to play in supporting country led strategies to reform and facilitate the engagement of stakeholders. Global political leadership and commitment of international policy makers responsible for priority health programs. If a new effort to scale up health professional education is to really transform the health of nations, it must be a process to reform that is driven by the people and communities who are the users of health services, implemented by national authorities working with public and private educational institutions, and supported by a broad range of stakeholders.	General	http://whqlibdoc.who.int/hq/2011/WHO_HSS_HRH_HEP2011.01_eng.pdf?ua=1
8	WHO	From Kampala to Bangkok: Reviewing Progress, Renewing Commitments- Outcome statement of the Second Global forum on Human Resources for Health Bangkok	Leadership by all state and non state actors at global, regional, national and local levels is required to focus attention on the health workforce. An "All of government response is essential to ensure coherent policies across sectors.	General	http://www.who.int/workforcealliance/knowledge/resources/bkkoutcome/en/
9	WHO	World Medicines Situation 2011: Storage and supply chain management	Opportunities may exist to improve distribution through public private partnerships, or by outsourcing select functions to the private sector which will require strong institutional contracting capacity within ministries of health.	General	http://www.technet-21.org/resources/documents/general/1635-world-medicines-situation-2011-storage-and-supply-chain-management

10	UNFPA	Agenda for Accelerated Country Action for Women, Girls, Gender Equality and HIV	Reinforce the translation of political commitments into scaled up action and resources for policies and programmers that address the rights and needs of women and girls in the context of HIV, with the support of all relevant partners, at the global, national and community level. Strengthening strategic guidance and support to national partners to know their epidemic and response in order to effectively meet the needs of women and girls.	General	http://www.unfpa.org/public/home/publications/pid/6234
11	WHO	Outsourcing vaccine supply chain and logistics to the private sector	Focused specialization: By transferring storage and transport management responsibility, governments and national immunization programs can better focus on defining policies and strategies to provide high quality vaccination services	Commodity specific: Vaccines	http://www.technet-21.org/resources/documents/distribution-systems-transportation-and-stock-management/1534-outsourcing-vaccine-supply-chain-and-logistics-to-the-private-sector
12	WHO	Project Optimize- Outsourcing the vaccine supply chain and logistics system to the private sector The Western Cape experience in South Africa	Dr. Luis Sambo (WHO Regional Director for Africa) called for greater private sector involvement, stating that " The health system challenges in the African region are too complex for the public sector to address alone". There is a clear role that the private sector can have in complementing governments' effort in improving health logistics in specific areas including procurement, storage, and distribution of drugs and	Country Specific: South Africa, Commodity Specific: Vaccines	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/Outsourcing_south_africa.pdf?ua=1

			vaccines. Supply chain outsourcing is one solution with enormous potential for the future.		
13	WHO	Working for Health Equity: The Role of Health Professionals	Working in partnership is essential to taking effective action to reduce inequalities. Key elements include collaborate, cooperative work that is either delivered jointly by more than one sector, or draws on information and expertise from other sectors.	General	http://www.who.int/workforcealliance/knowledge/resources/healthequity/en/
14	WHO	Planning the development of human resources for health for implementation of the Stop TB Strategy : a handbook	Cooperative arrangements between global initiatives, and national plans of action should be designed to complement and strengthen rather than duplicate and compete with health systems.	Disease specific : TB	http://apps.who.int/iris/handle/10665/44051
15	PtD	Healthcare Supply Chains in Developing Countries SITUATIONAL ANALYSIS	Partnership and outsourcing to third party logistics providers are considered best practice in commercial and developed country settings.	General	http://peoplethatdeliver.org/sites/peoplethatdeliver.org/files/dominique/files/Healthcare%20Supply%20Chains%20-%20Situation%20Analysis%20EN.pdf
16	PtD	Development of human resources for health in the WHO African region	Countries are urged to strengthen , sustain and formalize mechanisms for inter sector partnerships, including private sector, NGOs, for health workforce development. These collaborations must contribute to the planning, implementing and monitoring of national health workforce policies.	African Region	http://apps.who.int/iris/bitstream/10665/1807/1/AFR-RC57-9.pdf?ua=1

17	WHO	Improving Access to Essential Medicines	Public private partnerships can improve the access and availability of essential health products by leveraging their strength and skills to support its distribution.	General	http://www.technet-21.org/resources/documents/distribution-systems-transportation-and-stock-management/1273-improving-access-to-essential-medicines
18	WHO	Health Workforce Innovation: Accelerating Private Sector Responses to the Human Resources for Health Crisis	<ul style="list-style-type: none"> • Engaging the private health sector would result in improved efficiency and impact, increased sustainability and innovation and improved equity. The private sector plays a critical role in responding to the human resources for health crisis, and governments play a role in creating environments that engage the private sector. • The national health systems must leverage resources, health professionals, and infrastructure from both public and private health sectors in order to meet the health related MDGs. • Engaging the private health sector would result in improved efficiency and impact, increased sustainability and innovation and improved equity. 	General	http://www.who.int/workforcealliance/knowledge/resources/privatesectorhrh_report/en/

19	WHO	Community Health Workers and other Front Line Health Workers: Moving from Fragmentation to Synergy to achieve Universal Health Coverage	The stakeholders of community health programs must commit to enhancing collaborations towards efficient use of resources, robust accountability and use of evidence to inform policies, plans and vision for an improved health care system.	General	http://www.who.int/workforcealliance/knowledge/resources/chw_outcomemedocument/en/
20	WHO	Immunization Logistics and Supply Systems: From Vision to Action	Human resource gaps and a lack of information management systems for human resources are the common challenges in the immunization supply chain. Rationale and expertise must be taken from various partners such as; existing public and private sector partners, government, professional/ expert groups, front line implementers, media, advocacy groups, International standards bodies and private sector supply systems.	General	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/Optimize_Vision-Workshops_Report.pdf?ua=1
21	WHO	Consultation on Human Resources for Health for High Income Countries	Collaboration between different ministries and stakeholders, including trade unions and professional associations, among others, can enhance the effectiveness of health workforce planning and management. A joint approach for analyzing the needs, both in the short and in the long term, of different health care actors should be developed.	General	http://www.who.int/workforcealliance/knowledge/resources/oslo_consultation_report/en/

22	WHO	Unlocking the Potential for High Performance through the Pharmaceutical Supply Chain	Pharmaceutical companies must seek collaborative relationships with various partners and customers as well as within organizations for supply chain benefits.	General	http://blogspot.jsi.com/iphl2/files/2014/01/Unlocking-Potential-for-High-Performance-Pharmaceutical-Supply-Chain.pdf
23	WHO	The Global Health Workforce Alliance Strategy 2013-2016	Greater collaboration, outputs, and results are required to address the human resources for health crisis. Coordination among HRH stakeholders must be integrated within national health strategies to improve health outcomes.	General	http://www.who.int/workforcealliance/knowledge/resources/ghwastrategy20132016/en/
24	WHO	Advocacy and communications priorities for 2010-2011	The aim of the Health Workforce Advocacy Initiative is to bring together communications and advocacy partners to examine the current landscape and environment of the health workforce crisis, and to explore a potential shared vision for global advocacy and communications going forward.	General	http://www.who.int/workforcealliance/knowledge/resources/ghwa_commstrategy/en/
25	UNFPA	PRIVATE SECTOR ENGAGEMENT A Guidance Document for Supply Chains in the Modern Context	Private sector initiatives have contributed to addressing the challenges faced by supply chains by increasing efficiency and extending private sector expertise. Private sector engagement in supply chain can lead to strengthened health system as well as the health benefit of more lives saved by a robust system.	General	http://unfpa.org/webdav/site/global/shared/procurement/10_supply_chain/UNCoLSC%20Private%20Sector%20Engagement%20Guidance%20Document_FINAL.pdf

26	WHO	Human capacity-building plan for scaling up HIV/AIDS treatment / Treat 3 Million by 2005	The strategic approach for capacity building and scaling up of anti retroviral therapy builds on support of in country collaboration, bringing together governments and dedicated stakeholders and partners under the umbrella of the appropriate mechanisms for HIV/AIDS coordination.	Disease specific : HIV/AIDS	http://apps.who.int/iris/handle/10665/42846
27	WHO	Global Health Workforce Alliance: sharing experiences	For effective workforce management it is important to make use of the existing human resources. It is critical to develop partnerships with NGOs and other public private collaborations, change the skills mix, increase entrants create an appropriate working environment.	General	http://www.who.int/workforcealliance/knowledge/resources/lusaka_meetingreport/en/
28	WHO	A Universal Truth: No Health Without a Workforce	Political support needs to be built by having positive and active collaborations with the ministries, with partner organizations, public-private partnerships at the highest level to ensure continuity in the pursuit of universal health coverage.	General	http://www.who.int/workforcealliance/knowledge/resources/hrhreport2013/en/
29	WHO	Report on the first global forum on human resources for health	At the international level, it is necessary to encourage greater cooperation and shared learning among developing countries. Public private partnerships are necessary, as it is a cooperation between the different levels of government in determining needs. It is the close working relationship between the government, educational leaders and professional organizations in the planning, implementation and evaluation process that ensures transparency and accountability.	General	http://apps.who.int/iris/bitstream/10665/70834/1/WHO_HSS_HWA_ForumReport2010_eng.pdf?ua=1

30	WHO	GHWA Strategic Plan 2006	Stakeholders must work together to optimize performance of existing institutions consistent with their mandates, compatible with their capabilities and linked to the transparency and accountability of their actions.	General	http://www.who.int/workforcealliance/knowledge/resources/strategic_plan2006/en/
31	UNICEF	The Pursuit of Responsible Use of Medicines: Sharing and Learning from Country Experiences	Sensitize and promote the engagement of prescribers, dispensers and patients through multi stake holder workshops, determining educational requirements for health care professionals and public information campaigns. Ensure sustained, top down commitment of national authorities and promote active, bottom up engagement of stakeholders to the principles and policies fostering the responsible use of medicines.	General	http://www.who.int/medicines/publications/responsible_use/en/
32	WHO	Will we achieve universal access to HIV/AIDS services with the health workforce we have? A snapshot from five countries	The human resources for health crisis can be addressed by building collaborations between the Global Health Workforce Alliance and national organizations and crisis countries and an agreement must be made on guidelines for a proposed national HRH plan.	General	http://www.who.int/workforcealliance/knowledge/resources/uareport_en/en/
33	UNFPA	Guidelines for HIV/AIDS Interventions in Emergency Settings	Interventions for HIV/AIDS must - establish coordination and leadership mechanisms prior to an emergency, and leverage each organization's differential strengths, so that each can lead in its area of expertise. Local and national governments, institutions and target populations should be	General	http://www.unfpa.org/webdav/site/global/shared/documents/publications/2004/guidelines-hiv-emergencies.pdf

involved in planning, implementation and allocating human and financial resources.

34 WHO

Health workforce governance and leadership capacity in the African Region: review of human resources for health units in the ministries of health

Management of health workforce can be improved by coordinating and facilitating collaborative work of the government with local partners, civil/public service, education ministry, private sector and various professional bodies.

General

<http://apps.who.int/iris/bitstream/10665/99697/1/9789241503525.pdf?ua=1>

Appendix 3 Detailed document inclusions for theme two 'optimize policies and plans, summary of included documents'

Sr No	Organization	Title	Key Message	Context	URL
1	WHO	OPTIMIZE Tunisia Report	Key action for proper operation of the system involves developing a comprehensive set of SOPs that articulates each process and task and specific roles, responsibilities and accountabilities. 2. Integration of supply systems will be needed to minimize the investment in change and help reduce recurrent costs.	Country Specific : Tunisia	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/optimize_tunisia_report.pdf?ua=1
2	WHO	OPTIMIZE Albania Report	Development and implementation of an online Immunization information system can provide health staff at all levels with timely access to immunization records and vaccine stock data.	Country Specific: Albania	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/Optimize-Albania_report.pdf?ua=1
3	UNFPA	UNAIDS Action Framework	Action area 3 focuses on strengthening advocacy and capacity and resource mobilization and deliver a comprehensive set of measures to address the needs of women and girls in the context of HIV. It also assists countries to develop their national level HIV strategies, operational plans, monitoring and evaluation frameworks and associated budgets. Significant gaps have been identified in terms of reaching universal access targets for women and girls and achieving MDGs. Effective and sustained action for HIV prevention, treatment, care and support requires a far reaching advocacy and policy change.	HIV	http://www.unfpa.org/public/home/publications/pid/6875
4	UNFPA	Human Resources for Health Country Profile Guinea-Bissau	A national plan for development of human resources for health has been developed which involves setting up an effective communication plan, HRIS, Budget and resource mobilization, management tools, and monitoring and evaluation	Country Specific : Guinea Bissau	http://www.unfpa.org/sowmy/resources/docs/library/R047_AHWO_2010_GuineaBissau_HRHProfile.pdf

5	UNFPA	HUMAN RESOURCES FOR HEALTH STRATEGIC PLAN (Rwanda, Tanzania, Nepal)	The objectives for 2006-2010 included to develop specific statutes governing health professionals, update HRH policies, develop a training policy, establish accreditation systems for health professionals	Country Specific : Rwanda	http://www.unfpa.org/sowmy/resources/docs/library/R151_MOHRwanda_2006_HRH_strategicplan_2006-2010.pdf
6	WHO	PATH's experience in strengthening health systems	Strengthening systems, advancing technologies, improving front line health care by service management, and providing strategies and protocols based on evidence are the core competencies of PATH to ensure health within the reach of everyone.	General	http://www.path.org/publications/files/OTP_hss.pdf
7	WHO	PATH's Guiding Principles for Achieving Programmatic Impact	PATH participates in capacity building and institutional strengthening to guarantee the long term sustainability of the programs. The are involved in strategic planning, strengthening management and procurement systems, developing program and communication strategies and providing technical information. mPATH also influences national and international policy processes to promote greater health equity and the scaling up of successful innovations.	General	http://www.path.org/publications/files/ER_gp_impact.pdf
8	WHO	Nursing and midwifery capacity to contribute to health system strengthening and the achievement of MDGs: report of the 13th meeting, Geneva, 18-19 March 2010	Scaling up means investing. It is important to support teams of providers. Agreement on terms of scale up is essential.	General	http://apps.who.int/iris/handle/10665/70623
9	WHO	Transformative scale up of health professional education	To meet the needs of individuals and populations in an equitable and efficient manner and to ensure universal access and improve population health outcomes, it is necessary for transformative scale up in the health system.	General	http://whqlibdoc.who.int/hq/2011/WHO_HSS_HRH_HEP2011.01_eng.pdf?ua=1

10	WHO	From Kampala to Bangkok: Reviewing Progress, Renewing Commitments- Outcome statement of the Second Global forum on Human Resources for Health Bangkok OPTIMIZE	There is a need for a strong national capacity in all countries to regularly collect, collate, analyse and share data to inform policymaking, planning and management.	General	http://www.who.int/workforcealliance/knowledge/resources/bkkoutcome/en/
11	WHO	Guatemala- Report	The intervention's objectives include: Training human resources in systems development and database administration technologies, strengthening technical capacity for statistical analysis, Defining a health information policy that includes preparation of legal framework and establishing data standards, confidentiality protocols and data security.	General	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/guatemala_optimize_report.pdf?ua=1
12	WHO	Guiding principles for national health workforce strategies	The knowledge strategy involves; promoting synergy between partners, advocacy, knowledge brokering and monitoring effectiveness of interventions.	General	http://www.who.int/workforcealliance/knowledge/resources/hwai_nationalhrhplan_guidelines/en/
13	WHO	World Medicines Situation 2011: Storage and supply chain management	There is a need for a national coordination mechanism, to share financial or logistical information among funding partners that is coherent and efficient.	General	http://www.technet-21.org/resources/documents/general/1635-world-medicines-situation-2011-storage-and-supply-chain-management
14	WHO	Practices to improve coverage of the hepatitis B birth dose vaccine -	Leadership and governance practices include; consideration of a central policy that mandates universal new born vaccination, clear national guidance defining timely birth dose as within 24 hours of birth, strong central communications to support public confidence in vaccinations.	General	http://apps.who.int/iris/handle/10665/78616

15	WHO	Migration of health workers	For equitable balance of the interest of health workers, there needs to be emphasis given to the health worker migration in countries experiencing a health worker crisis. There must be greater commitment to assist countries facing a critical shortage, promote joint investment in research and information systems and member states should meet their personal health needs with their own human resources and take measures to train, retain and sustain their health workers.	General	http://www.who.int/workforcealliance/knowledge/resources/migration_factsheet/en/
16	UNFPA	Agenda for Accelerated Country Action for Women, Girls, Gender Equality and HIV	Assisting countries to ensure that national HIV and development strategies, operational plans, monitoring and evaluation frameworks and associated budgets address the needs and rights of women and girls in the context of HIV. Advocacy, capacity strengthening and mobilization of resources to deliver a comprehensive set of measures to address and rights of women and girls in the context of HIV.	General	http://www.unfpa.org/public/home/publications/pid/6234
17	WHO	Reducing the need for parallel supply chains	A lack of coordination between ministries of health, public health programs, central medical stores, announced their numerous partners results in huge quantities of products, leading to overstocks, expiration, and massive waste of valuable health supplies. A integrated supply chain system will allow public health programs to reduce uncertainties and risks, achieve economics of scale, shorten delivery lead times, improve procurement, provide better incentives for health workers and improve client service.	Commodity Specific: Vaccines	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/supply_chain_integration.pdf?ua=1

18	WHO	Project Optimize Reports : Innovative health supply chain solutions (Vietnam, Senegal, Tunisia), Collaborating with countries to improve supply chains	An integrated health supply system managed using a computerized logistics and management information system can help to increase efficiency and performance preparing the country for new vaccines in the future.	Country Specific: Senegal, Tunisia	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/supply_chain_integration.pdf?ua=1 , http://www.who.int/immunization/programmes_systems/supply_chain/optimize/optimize_factsheet_Tunisia_EN.pdf?ua=1 http://www.who.int/immunization/programmes_systems/supply_chain/optimize/collaborating_with_countries_to_improve_supply_chains.pdf?ua=1
19	UNICEF	NATIONAL CAPACITY DEVELOPMENT FOR THE EMERGENCY SUPPLY AND LOGISTICS SYSTEM, UGANDA	The national supply and logistics system can be enhanced by: clearly identifying tangible and measurable benchmarks for the capacity development, articulating what exactly the capacity development should lead to and by when , having standardized operating procedures for clear and consistent modalities of distribution.		http://prod.supplychainsforchildren.org/en/supply-chain-stories/national-capacity-development-for-the-emergency-supply-and-logistics-system
20	WHO	Guide to health workforce development in post-conflict environments	HRH Plans are an integral component of the health system and the plan must include policies related to the mission and goal of health services, which provide basis for future development of the legislative framework.	General	http://apps.who.int/iris/handle/10665/43243

21	WHO	HRH roadmap input	In describing the HRH strategies that countries develop, the roadmap should be explicit that these plans should be designed to develop the health workforce, including in numbers, distribution, skills mix, and competencies- required to achieve MDGs and other health goals and commitments.	General	http://www.who.int/workforcealliance/knowledge/resources/hwai_roadmap/en/
22	WHO	Report of the First Meeting of the Health Workforce Information Reference Group, Monteux, Switzerland	Governments along with their partners should focus on activities related to improve research and develop capacity for data management in order to institutionalize evidence based decision making and enhance shared learning, facilitate knowledge exchange and identify gaps in developing new tools. Standards and protocols for disseminating, sharing and using data across different components of the HRH information system must be established.	General	http://apps.who.int/iris/bitstream/10665/70332/1/WHO_HSS_HRH_HIG_2010.1_eng.pdf?ua=1
23	WHO	Report of the High Level Meeting on AIDS Side event on Human Resources for Health: 'Can We Achieve MDG6 With the Health Workforce We Have?	In order to fill the gaps and challenges involved with the health worker crisis, estimating numbers and types of health workers needed to reach international targets, strengthening workforce management systems, implementing cost effective plans for increasing and improving the health workforce and scaling up approaches are required.	General	http://www.who.int/workforcealliance/knowledge/resources/hlmjune2011report/en/
24	WHO	No Child out of Reach - Time to end the health worker crisis	For a fully effective health policy, a robust health information and surveillance systems, strengthening the ministry of health's ability to plan manage and develop human resources, and to develop a health management information system to monitor and evaluate human resource capacity is essential.	General	https://www.savethechildren.org.uk/sites/default/files/docs/No_Child_Out_of_Reach_1.pdf
25		Financing and economic aspects of health workforce scale-up and improvement: framework paper	Country level analysis is essential in producing accurate estimates for financing of HRH Scale up. In addition, global knowledge management of country level; work would greatly benefit financing of HRH Scale up. To ensure the long term sustainability of HRH Scale up, it is desirable for a maximum of domestic resources be mobilized with external resources used to fill the remaining gap. International aid must be complemented by efforts in the area of macro management which includes ensuring sustainability in the face of aid uncertainty and variability and working within each country's own long term economic aspects.	General	http://www.who.int/workforcealliance/knowledge/resources/rrt_framework/en/

26		Technical Reference Team: Recommendation 6 : Supply and awareness	Recommendations for improving the supply of life saving commodities include utilizing best practises in Information and communication technology (ICT), develop guidance quantification, supply chain integration, and up gradation of existing ICT systems	General	http://www.path.org/publications/files/APP_un_comm_rec6.pdf
27	WHO	Planning the development of human resources for health for implementation of the Stop TB Strategy : a handbook	The resources mobilized through global initiatives have been important in focussing international attention on major issues and accelerating progress towards the MDGs. There is now an urgent need to ensure that these resources effectively complement and build sustainable health systems that address full range of health needs of a population.	Disease specific : TB	http://apps.who.int/iris/handle/10665/44051
28	WHO	Task Shifting: Global Recommendations and Guidelines.	Countries and donors should ensure that task shifting plans are appropriately costed and adequately licensed so that the services are sustainable.	General	http://www.who.int/healthsystems/TTR-TaskShifting.pdf
29	WHO	Supply Chain models and consideration for community- Based distribution programs: A program manager's guide.	This report talks about various supply chain models for supply chain strengthening indicating the importance of a good logistics management information system with effective human resource training for optimal capacity building.	General	http://www.jsi.com/JSIInternet/Inc/Common/_download_public.cfm?id=11132&lid=3
30	PtD	Healthcare Supply Chains in Developing Countries SITUATIONAL ANALYSIS	<ul style="list-style-type: none"> • Medicine supply chains are people supply chains and dependent not just on financial and technical inputs but also on capacity building. • Web based LMIS with online reporting of logistics data offer the possibility of improving data visibility, a key characteristic of well-functioning supply chains. 	General	http://peoplethatdeliver.org/sites/peoplethatdeliver.org/files/dominique/files/Healthcare%20Supply%20Chains%20-%20Situation%20Analysis%20EN.pdf

31	PtD	Development of human resources for health in the WHO African region	Effective planning is essential for future human resource needs based on current shortfalls and linked to the potential to recruit an expanded health workforce. Therefore countries are encouraged to develop and implement evidence based comprehensive HRH policies and plans with involvement from numerous sectors and stakeholders.	African Region	http://apps.who.int/iris/bitstream/10665/1807/1/AFR-RC57-9.pdf?ua=1
32	UNFPA	Human Resource Strategy Options for Safe Delivery	Improving human resource planning and management involves developing a mechanism to ensure that infrastructure and equipment planning linked to human resource planning and install a reliable and functional human resource information system, produce regular analysis of the data for managers, and use the data for all human resource planning and management decisions.	General	http://www.unfpa.org/sowmy/resources/docs/library/R086MOHNepal_2009_HR_StrategyOptionsforSafeDelivery.pdf
33	UNFPA	Medicines for Maternal Health	A priority focus should be given on improving tracking of presence of maternal health medicines and health workers permitted and trained to use them in national and sub national policy, including standard treatment guidelines, budget lines, national procurement and logistics management systems and programmatic guidance and preservice education.	General	http://www.unfpa.org/public/home/publications/pid/10265
34	WHO	Improving Access to Essential Medicines	Access to essential health products can be improved by developing logistics management information systems	General	http://www.technet-21.org/resources/documents/distribution-systems-transportation-and-stock-management/1273-improving-access-to-essential-medicines
35	WHO	An Assessment of Vaccine Supply Chain and Logistics Systems in Thailand	For an improved distribution of vaccines, improving IT systems, to a streamlined Vendor Management inventory system could be adapted.	Country Specific: Thailand	

36	WHO	Consultation on Human Resources for Health for High Income Countries	The health worker roles and norms must be rethink and reframed so as to suit the current situation, there needs to be space for task shifting and new responsibilities, new ways for health workforce to carry out their responsibilities. Lessons needs to be learnt from other countries and regimes in regard to knowledge sharing of similar problems.	General	http://www.who.int/workforcealliance/knowledge/resources/oslo_consultation_report/en/
37	WHO	Avian influenza: preparedness and response to the threat: report of the Regional Director	The priority actions required for preparedness of pandemic Influenza includes an increase in government leadership, putting in place adequate funding mechanisms, strengthening human resource systems and programs for health promotion.	Disease Specific: Avian Influenza	http://apps.who.int/iris/bitstream/10665/1849/1/AFR-RC56-15.pdf?ua=1
38	UNFPA	MINISTRY OF HEALTH REPUBLIC OF GHANA HEALTH COMMODITY SUPPLY CHAIN MASTER PLAN	Key activities in the master plan includes building institutional capacity and roles, resource mobilization, monitoring and evaluation and upstream coordination.	County Specific: Ghana	http://www.unfpa.org/webdav/site/global/shared/procurement/10_supply_chain/GhanaSCM%202013.pdf
39	WHO	Case Study: Scaling Up Education and Training of Human Resources for Health in Ethiopia. Moving towards achieving the MDGs.	The human resources management plan includes planning, monitoring and evaluation by assessment of current situation, supply and demand assessment and having an electronic human resource information system in place with the aim of reducing manual workload and modernizing the cumbersome administrative system.	Country Specific: Ethiopia	http://www.who.int/workforcealliance/knowledge/resources/ethiopia_casestudy_2010/en/
40	WHO	A Universal Truth: No Health Without a Workforce	Policies must be planned and executed keeping in mind the future needs which vary and long term plans must be designed.	General	http://www.who.int/workforcealliance/knowledge/resources/hrhreport2013/en/
41	WHO	"More money for HRH: more HRH for the money"	1. Financing HRH should consider there is increased external aid for HRH, improved planning and targeting of external aid, development of a better and transparent mechanism for HRH expenditures and donor contributions, utilization of country coordination and facilitation process for increased investment and improved sustainability for HRH. 2.	General	http://www.who.int/workforcealliance/knowledge/resources/hrhfinancingbrief2012/en/

			Improve motivation and retention of health workers by implementing appropriately designed financial and non financial incentives.		
42	WHO	Policies and practices of countries that are experiencing a crisis in human resources for health: tracking survey	Policies must not only focus on education and training of the health workforce, but it must also address the issue of supervision and monitoring keeping the country specific needs into focus.	General	http://apps.who.int/iris/bitstream/10665/44480/1/9789241500821_eng.pdf?ua=1
43	WHO	Mid-level health workers for delivery of essential health services	Policies are needed to be defined at the national and sub national levels of the appropriate skills mix of cadres with identification of their roles, taking into consideration the demands of the community and the country's changing disease patterns. Policies should be designed on the basis of good available evidence and then be implemented at scale.	General	http://www.who.int/workforcealliance/knowledge/resources/mlp2013/en/
44	UNICEF	The Pursuit of Responsible Use of Medicines: Sharing and Learning from Country Experiences	A list of essential medicines should be identified and partial to full reimbursement should be granted at the national level to medicines and their access must be regulated in public health care facilities to ensure broader and efficient use of medicines.	General	http://www.who.int/medicines/publications/responsible_use/en/
45	WHO	Achieving the Global Vision for Future Immunization Supply and Logistics Systems: Action Plans	Immunization information system help staff plan and manage immunization activities and resources while ensuring that adequate quantity of vaccines are always available to meet demand. Human resources policies provide immunization supply's systems with adequate number of competent, motivated and empowered personnel to overcome existing immunization supply challenges.	General	http://www.technet-21.org/resources/documents/distribution-systems-transportation-and-stock-management/1539-achieving-the-global-vision-for-future-immunization-supply-and-logistics-systems-action-plans

46	UNFPA	Asia and the Pacific Regional Forum on Strengthening Partnerships with Faith-Based Organisations in Addressing ICPD	Improve and reform educational organizations and curricula at all levels, link post graduate studies to the comprehensive development plans of the faith based organizations. At the same time, priority should be given to science and technology and facilitating academic interaction and exchange of knowledge among the faith based academic institutions, while striving for quality education which promotes creativity and innovation.	General	http://www.unfpa.org/public/home/publications/pid/2562
47	WHO	Health workforce governance and leadership capacity in the African Region: review of human resources for health units in the ministries of health	Management of health services can be improved by coordinating and facilitating the generation, analysis and dissemination of health workforce intelligence and evidence for effective decision making at policy, planning and implementation levels and by coordinating and implementing the HRH plan.	General	http://apps.who.int/iris/bitstream/10665/99697/1/9789241503525.pdf?ua=1
48	WHO	Scaling Up, Saving Lives	National governments must draw up 10-year-scale-up plans and implement an immediate and huge increase in community and mid level health workers who are paid, trained, supervised and are able to refer on to more skilled workers.	General	http://www.who.int/workforcealliance/documents/Global_Health%20FINAL%20REPORT.pdf?ua=1

Appendix 3 Detailed document inclusions for theme three 'workforce development'

Sr No	Organization	Title	Key Message	Context	URL
1	UNFPA	Human Resources for Health Country Profile Guinea-Bissau	Main issues to be addressed in the area of training include; mechanisms for coordination between the various ministries in order to improve coordination of training periods. Ways must be identified to make resources sustainable including building up a medical teaching faculty. Working conditions and staff retention strategies must be improved.	Country Specific : Guinea Bissau	http://www.unfpa.org/sowmy/resources/docs/library/R047_AHWO_2010_GuineaBissau_HRHProfile .pdf
2	UNFPA	HUMAN RESOURCE S FOR HEALTH STRATEGI C PLAN (Rwanda, Tanzania, Nepal)	There is a need to define the scope of practice for each category of health workers. Job descriptions have been developed for some categories; often however the definitions are broad or implicit and because of the shortage of qualifies staff, tasks may be overlapping between two different categories of health professionals, This is mainly due to inadequate design of pre service training along the continuum. The strategic plan aims to support review of curricula for competence based programs in preservice education, develop post graduate and post basic training schedule and develop funding mechanisms for post graduate education of health professionals.	Country Specific : Rwanda	http://www.unfpa.org/sowmy/resources/docs/library/R151_MOHRwanda_2006_HRH_strategicplan_2006-2010.pdf
3	WHO	PATH's Guiding Principles for Achieving Programmatic Impact	One of the guiding principles of PATH is to provide health staff with practical orientation and framework and assess resources and institutional capacity needed to implement an innovation.	General	http://www.path.org/publications/files/ER_gp_impact.pdf
4	UNFPA	Human Resources for Health Country Profile Uganda	Roles and responsibilities of individuals, employers and individual bodies and associations need to be defines. Continued professional development must be integrated with a set of interventions and regulations to enhance performance.	Country Specific: Uganda	http://www.unfpa.org/sowmy/resources/docs/library/R052_AHWO_2009_Uganda_HRHProfile.pdf

5	UNFPA	Human Resources for Health: Country Profiles	Country Specific: Guinea- Bissau	http://www.unfpa.org/sowmy/resources/docs/library/R047_AH_WO_2010_GuineaBissau_HRHProfile .pdf
6	UNFPA		Country Specific: Nigeria	http://www.unfpa.org/sowmy/resources/docs/library/R050_AH_WO_2008 Nigeria_HRHProfile .pdf
7	UNFPA		Country Specific: Malawi	http://www.unfpa.org/sowmy/resources/docs/library/R048_AH_WO_2009 Malawi_HRHProfile .pdf
8	UNFPA		Country Specific: Ethiopia	http://www.unfpa.org/sowmy/resources/docs/library/R045_AH_WO_2010 Ethiopia_HRHProfile .pdf
9	UNFPA		Country Specific: Gambia	http://www.unfpa.org/sowmy/resources/docs/library/R046_AH_WO_2009 Gambia_HRHProfile .pdf

10	WHO	Scaling up the capacity of nursing and midwifery services to contribute to the achievement of the MDGs: report of the 11th meeting	Development of a database : i.e. a roster of health professionals who are trained in public health pre-deployment courses.	General	http://apps.who.int/iris/handle/10665/70629
11	WHO	Health workers for all and all for health workers An Agenda for Global Action	Government leaders, Ministries of health and other national leaders should commit to providing 'all people everywhere with access to a skilled, motivated and facilitated health worker within a robust health system'. By - building coherent national and global leadership for health workforce solutions, scaling up health worker education and training, and retaining an effective, responsive and equitably distributed health workforce.	General	http://www.who.int/workforcealliance/knowledge/resources/aga_meetingdeclaration/en/
12	WHO	Guiding principles for national health workforce strategies	The health workforce plan should incorporate human rights education into pre service education and the training should be aimed at national health needs, including primary health needs and other innovative measures to accurate expansion must be considered.	General	http://www.who.int/workforcealliance/knowledge/resources/hwai_nationalhrhplan_guidelines/en/

13	WHO	Access for all to skilled, motivated, and supported health workers	Enhancing the quality of the health workforce is extremely essential. In this respect, competency based curricula, patient-cantered education, accreditation and regulation of training institutions, incorporating human rights training into pre-service and in-service curricula is required.	General	http://www.who.int/workforcealliance/knowledge/resources/bckdpaper_unsgstrat_2010/en/
14	WHO	Practices to improve coverage of the hepatitis B birth dose vaccine -	Increasing skilled attendance at birth, preferably in well supported health facilities, is a critical part of improving birth dose coverage. Coordinated planning between immunization and maternal health staff in health facilities and in districts is critical to birth dose vaccination.	General	http://apps.who.int/iris/handle/10665/78616
15	WHO	Midwifery Workforce Management and Innovation	Strategies for improving health worker retention and inhibit health worker migration; include, a bonding mechanism, a minimum duration of time in exchange for scholarships to a higher degree, and monetary incentives.	General	http://www.who.int/workforcealliance/knowledge/resources/swmrbckdpaperhrh/en/
16	WHO	Guide to health workforce development in post-conflict environments	HRH plan must include; planned continuing education to strengthen capacity in clinical skills and leadership/ management, with links to the educational sector. The gaps between the emergency training and level of scientific and technical knowledge and skills required to effectively undertake the continuing courses offered by the donor agencies.	General	http://apps.who.int/iris/handle/10665/43243

17	UNICEF	STRENGTHENING LOGISTIC SUPPORT FOR BETTER SERVICE DELIVERY OF HEALTH COMMODITIES	For a health sector development plan to effectively reduce child mortality and maternal mortality, all fundamental elements need to be in place namely-trained and supervised health extension workers, health posts and effective communication between different levels of the health system.	General	http://prod.supplychainsforchildren.org/en/supply-chain-stories/strengthening-logistic-support-for-better-service-delivery-of-health-commodities
18	WHO	Integrating community health workers in national health workforce plans.	Ensure a regular and sustainable remuneration stipend and, if possible, complement it with other rewards, which may include financial and non financial incentives. Ensure a positive practise environment, including regular and continuous supportive supervision, health and safety issues, communication needs, a clean environment, manageable workload and the availability of drugs/ supplies/ equipment.	General	http://www.who.int/workforcealliance/knowledge/resources/CHW_KeyMessages_English.pdf
19	WHO	Working for Health Equity: The Role of Health Professionals	A greater focus on information about social determinants of health, and information on what works to tackle health inequities, should be included as mandatory, assessed element of undergraduate and post graduate education. Proper communication skills knowledge, continued professional development, and making sure that universities take steps to ensure that students from all socio economic backgrounds have fair access to health care careers.	General	http://www.who.int/workforcealliance/knowledge/resources/healthequity/en/

20	WHO	The World Health Report 2006. Working together for health	Achieving Millennium development goals will depend on finding effective human resource approaches that can be implemented rapidly. But simply training people to deliver disease approaches should also consider the larger health system challenges that are related to the pervasive disadvantages associated with low income.	General	http://www.who.int/workforcealliance/knowledge/resources/whrreport_2006/en/
21	WHO	Planning the development of human resources for health for implementation of the Stop TB Strategy : a handbook	Getting the right workers in the right place at the right time is absolutely fundamental to health results. The health workforce operates as the common "currency" in harmonizing health systems and priority disease programs. Ultimately, the priority that countries accord to training, deployment, and tasks assigned to workers is where health systems and global initiatives come together. This is true not only for overall health workforce development, but also for HRD within the context of a global health initiative such as TB control.	Disease specific : TB	http://apps.who.int/iris/handle/10665/44051
22	WHO	Task Shifting: Global Recommendations and Guidelines.	Training programmes and continuing educational support for health workers should be tied to certification, registration and career progression mechanism that are standardized and nationally endorsed.	General	http://www.who.int/healthsystems/TTR-TaskShifting.pdf
23	PtD	Healthcare Supply Chains in Developing Countries SITUATIONAL ANALYSIS	A desirable supply chain must have a clarity of roles and responsibilities of the health workers with an alignment of objectives and incentives.	General	http://peoplethatdeliver.org/sites/peoplethatdeliver.org/files/domique/files/Healthcare%20Supply%20Chains%20-%20Situation%20Analysis%20EN.pdf

24	PtD	Conference Statement of Commitment to Action	Limitations on health supply chain performance stem, in part, from inadequate competencies in health workforce for supply chain management as well as the assignment of supply chain roles to health workers whose primary responsibilities are in other health areas; and the health supply chain workforce faces a wide array of human resource related challenges in relevant training and education, relevant technical and managerial competency, empowerment , continuing professional development opportunities, incentives for job performance and career advancement opportunities.	General	<a href="http://www.peo
plethatdeliver.org/sites/people
thatdeliver.org/files/dominique/fil
es/Conference%20Statement%20
0of%20Commitment%20to%20
Action%20EN.pdf">http://www.peo plethatdeliver.org/sites/people thatdeliver.org/files/dominique/fil es/Conference%20Statement%20 0of%20Commitment%20to%20 Action%20EN.pdf
25	PtD	Development of human resources for health in the WHO African region	Increased involvement is needed in preservice training to produce more health workers. Countries need to strengthen the capacity of training institutions for scaling up production of health workers, especially midlevel cadres to deliver primitive, preventive and curative health care.	African Region	http://apps.who.int/iris/bitstream/10665/18071/AFR-RC57-9.pdf?ua=1
26	UNFPA	Human Resource Strategy Options for Safe Delivery	Competency based skills training must be given to all cadres of midwives and nurses and a periodic assessment of competencies must be made.	General	http://www.unfpa.org/sowmy/resources/docs/library/R086_MOHNepal_2009_HR_StrategyOptionsforSafeDelivery.pdf

27	WHO	Training for better TB control : human resource development for TB control : a strategic approach within country support	The long term goal for human resource development for TB control is to reach and sustain a situation where staff at different levels of the health system have the skills, knowledge and attitudes (i.e. are competent) necessary for successful implementation and sustaining TB control activities including implementation of new and revised strategies and tools and in relation to HIV management.	Disease specific : TB	http://apps.who.int/iris/bitstream/10665/67321/1/WHO_CDS_TB_2002.301.pdf?ua=1
28	UNFPA	Medicines for Maternal Health	Ensuring adequate competency through training, supervision and accountability of providers regarding the administration of maternal health medicines, and supply managers regarding resupply of those medicines is critical to increasing the medicines' utilization by ensuring their continuous availability, To build competency of supply chain managers, existing curricula, procedures, standards and guidelines for supply chain management should be strategically implemented to address the known gaps in knowledge, attitudes and practices of these equally important health system workers.	General	http://www.unfpa.org/public/home/publications/pid/10265
29	UNICEF	UNICEF Supply Annual Report 2012	Training and professional development activities designed for UNICEF procurement and logistics staff are being adopted and applied by governments and other partners investing in the professionalization of their own supply chain workforces. Staff providing support services to the supply function cover a range of disciplines, including human resources, information technology, knowledge sharing and communication.	General	http://www.unicef.org/supply/index_report.html

30	UNFPA	MINISTRY OF HEALTH REPUBLIC OF GHANA HEALTH COMMODITY SUPPLY CHAIN MASTER PLAN	While human resource needs are recognized by some of the various supply chain entities, skills and number of supply chain related personnel are limited due to unclear roles and lack of investment. Thus, the supply chain needs to have adequate human capacity both in terms of quality and quantity and the skills that reflect job requirements, with sufficient preservice training in professional and technical supply chain related to logistics.	County Specific: Ghana	http://www.unfpa.org/webdav/site/global/share/d/procurement/10_supply_chain/GhanaSCM%202013.pdf
31	WHO	Human capacity-building plan for scaling up HIV/AIDS treatment / Treat 3 Million by 2005	In a sustainable approach to develop human resources, emergency pre and in-service training must be provided ensuring the match between workforce needs and supplies taking into account the place of training, migration of health care workers, retention of skilled personnel, stigma attached to working with HIV/AIDS and also the impact of HIV/AIDS on the staff itself.	Disease specific : HIV/AIDS	http://apps.who.int/iris/handle/10665/42846
32	PtD	PtD Competency Compendium	The compendium gives a relationship between 6 domains for an efficient human resource development in the supply chain which is an intricate relationship between- Selection and quantification, procurement, storage and distribution, use, resource management which are all together encompassed under personal/ professional management.	General	http://www.peoplethatdeliver.org/sites/peoplethatdeliver.org/files/Feb%2014th%20FINAL%20PtD%20Public%20Health%20SCM%20Competency%20Compendium%20with%20ISBN%20and%20CC%20

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33		PtD Strategic Plan	There is limited availability of localized supply chain management training and education and non existent career paths for those personnel involved in supply chain activities, coupled with a lack of recognition that these personnel need to be developed, incentivized and involved in decision making process.	General	http://www.peoplethatdeliver.org/sites/peoplethatdeliver.org/files/basicpages/PtD%20Strategic%20Plan%20-%20FINAL%20(website%20version).pdf
34	PtD	Workforce Excellence in Health Supply Chain Management : Literature Review	Training should include topics relevant to functions staff perform such as financial planning, transport and distribution, stores management and logistics management training should include pre service training, on the job training, group based learning, experiential learning and distance learning.	General	http://peoplethatdeliver.org/sites/peoplethatdeliver.org/files/People%20that%20Deliver/files/Literature%20Review%20EN.pdf
35	PtD	Improving health outcomes through sustainable health workforce excellence in	Health institutions must incorporate supply chain competency as an integral part of pre service training and professional development for the clinical and pharmaceutical cadres who currently manage supply chain or develop and recruit a cadre of dedicated supply chain professionals, and shift supply chain tasks in the health system to those personnel.	General	http://www.peoplethatdeliver.org/sites/peoplethatdeliver.org/files/dominique/files/PtD%20White%20Paper%20EN.pdf

supply chain
management

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| 36 | WHO | Case Study: Scaling Up Education and Training of Human Resources for Health in Ethiopia. Moving towards achieving the MDGs. | For rapid scale up of competencies in health workers, pre-service and in-service training are essential parameters. Also establishing a regulatory mechanism for education and graduates and proving accreditation will also help in career progression of the health professionals. | Country Specific: Ethiopia | http://www.who.int/workforcealliance/knowledge/resources/ethiopia_casestudy_2010/en/ |
| 37 | WHO | Global Health Workforce Alliance: sharing experiences | Training strategies should consider appropriate skill mixes and the need to strengthen pre service education. Training should focus on all aspects of health, including prevention and promotion in order to reduce disease burden. | General | http://www.who.int/workforcealliance/knowledge/resources/lusaka_meetingreport/en/ |
| 38 | WHO | A Universal Truth: No Health Without a Workforce | Innovative approaches to expanding the quality of health coverage include; scaling up education systems to serve underserved communities, harnessing information and communication technology to improve the quality of health professional education and access to health services. | General | http://www.who.int/workforcealliance/knowledge/resources/hrreport2013/en/ |

39	WHO	Report on the first global forum on human resources for health	Addressing the health workforce problem will require enormous and immediate efforts by governments and international partners to increase the number and quality of health workers by scaling up training and education opportunities. This should include building an appropriate skills mix that is tailored to local needs.	General	http://apps.who.int/iris/bitstream/10665/70834/1/WHO_HSS_HWA_ForumReport2010_eng.pdf?ua=1
40	WHO	Scaling Up, Saving Lives	Education and training curricula must be focused on the health needs of the country and community and must be team based. They must draw on to the resources of the public and private sectors and skills of international partners and make greater use of innovative means to increase training capacity, such as information and communication technologies.	General	http://www.who.int/workforcealliance/document/Global_Health%20FINAL%20REPORT.pdf?ua=1

Appendix 5 Detailed document inclusions for theme four 'increased performance'

Sr No	Organization	Title	Key Message	Context	URL
1	WHO	OPTIMIZE Tunisia Report	Planning for a high performance logistics system that is effective, reliable and highly efficient could help manage the vaccine distribution system.	Country Specific : Tunisia	http://www.who.int/immunization/programmes_systems/supply_chain/optimize/optimize_tunisia_report.pdf?ua=1
2	UNFPA	HUMAN RESOURCES FOR HEALTH STRATEGIC PLAN 2006-2010 Rwanda	The following objectives were included in the strategic plan to improve management and performance : Develop career plans for each category of health workers, assess workload staffing needs, improve supervision and leadership, improve working conditions for health professionals, develop motivation strategies.	Country Specific : Rwanda	http://www.unfpa.org/sowmy/resources/docs/library/R151_MOHRwanda_2006_HRH_strategicplan_2006-2010.pdf
3	WHO	PATH's experience in strengthening health systems	PATH helps programs offer supportive supervision, from encouraging uptake of national standards to strengthening monitoring systems.	General	http://www.path.org/publications/files/OTP_hss.pdf
4	UNFPA	Agenda for Accelerated Country Action for Women, Girls, Gender Equality and HIV	Champion leadership for an enabling environment that promotes and protects the human rights of women and girls and their empowerment, in the context of HIV, through increased advocacy and capacity and adequate resources.	General	http://www.unfpa.org/public/home/publications/pid/6234

5	WHO	Addis Ababa Declaration: international conference on task shifting	It is important to recognize that reorganization and decentralization of health services, including task shifting, can help address the current shortages of health workers, if implemented alongside a broad range of other strategies that are designed to address other aspects of the human resources for health crisis.	General	http://www.who.int/workforcealliance/knowledge/resources/addisdeclaration/en/
6	WHO	Task Shifting: Global Recommendations and Guidelines.	<ul style="list-style-type: none"> • Countries should either adapt existing or create new human resource quality assurance mechanisms to support the task shifting approach. These should include processes and activities that define, monitor and improve the quality of services provided by all cadres of health workers. • Supportive supervision and clinical monitoring should be regularly provided to all health workers within the structure and functions of health teams. 	General	http://www.who.int/healthsystems/TTR-TaskShifting.pdf
7	WHO	Case Study: Scaling Up Education and Training of Human Resources for Health in Ethiopia. Moving towards achieving the MDGs.	Improved human resource management through federal, regional and local levels will involve recruitment, incentives to retain existing staff, and improved performance of employees in order to reach their health goals. Introducing new monetary and non monetary incentive packages to enhance public health sectors capacity to attract and retain health workers particularly in rural settings has to be carefully and strategically designed.	Country Specific: Ethiopia	http://www.who.int/workforcealliance/knowledge/resources/ethiopia_casestudy_2010/en/

8	WHO	The Uganda Country Case Study: Positive Practice in Uganda: Enhancing health worker and health system performance	The motivation and retention strategy states that the underlying cause of human resources for health problem range from HRH Management systems to leadership, policy, finance, management, education among others. Thus performance can be improved by paying the health worker an appropriate working wage along with incentives.	Country Specific: Uganda	http://www.who.int/workforcealliance/knowledge/resources/ppeuganda/en/
9	WHO	Mid-level health workers for delivery of essential health services	A coherent deployment and retention strategy should be planned and implemented to expand the range of incentives that may allow an improved use of mid level health workers who can provide quality health care.	General	http://www.who.int/workforcealliance/knowledge/resources/mlp2013/en/
10		HIV and human resources: competing priorities or interconnected solutions?	A motivated health workforce are the drivers of a well functioning health system. In the face of a crisis with the magnitude of AIDS, we must ensure the health workforce is supported and motivated. Health workers must be sensitized as well to help reduce the stigma and discrimination of people living with HIV.	General	http://www.who.int/workforcealliance/knowledge/resources/aids2008_satellitereport/en/
11	UNFPA	Guidelines for HIV/AIDS Interventions in Emergency Settings	accessing and monitoring of interventions should take place from time to time and must involve conducting situational and capacity analysis, develop indicators and tools involving local institutions and beneficiaries .	General	http://www.unfpa.org/webdav/site/global/shared/documents/publications/2004/guidelines-hiv-emergencies.pdf

Appendix 6 Detail document inclusions for theme five 'Professionalization'

Sr No	Organization	Title	Key Message	Context	URL
1	PtD	Professionalizing Supply Chain Management To Improve Health System Performance	There needs immense professionalization of logistics chain managers, training for all elements of propel involved in the supply chain, harmonization of practices at sub regional level and professionalization that recognized and integrates the diversity of the countries and the individuals managing the supplies.	Country Specific-Mozambique	http://www.peoplethatdeliver.org/sites/peoplethatdeliver.org/files/418/files/Burkina%20Faso%20-%20Professionalising%20Supply%20Chain%20Management%20EN.pdf
2	UNICEF	UNICEF Supply Annual Report	A network of supply chain professionals with both broad and highly specialized expertise needs to be nurtured and developed if overall supply chain improvements are to be fully realized and sustained.	General	http://www.unicef.org/supply/index_report.html
3	PtD	Workforce Excellence in Health Supply Chain Management: Literature Review	Approaches to professionalize the supply chain include task shifting, outsourcing, conducting costing studies, establishing logistics management units, developing incentives, creating accreditation and strengthening policy.	General	http://peoplethatdeliver.org/sites/peoplethatdeliver.org/files/Literature%20Review%20EN.pdf
4	WHO	Addis Ababa Declaration: international conference on task shifting	It is important to recognize that reorganization and decentralization of health services, including task shifting can help to address the current shortages of health workers, if implemented alongside a broad range of other strategies that are designed to address other aspects of the human resource health crisis.	General	http://www.who.int/workforcealliance/knowledge/resources/addisdeclaration/en/