



HEALTH SUPPLY CHAIN CASE STUDIES

Initial Results

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PEOPLE
that
DELIVER

Health Supply Chain Case Studies

Initial Results

Compiled for:

People that Deliver

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Introduction

The supply chains for medical supplies and equipment are challenging to execute, with special product handling requirements such as cold chain, challenging forecasting conditions with significant uncertainty, complex regulations regarding product quality and safety, and an every present risk of counterfeit products entering the supply chain. When combined with the challenges of operating in developing country environments, medical supply chain management becomes a complex task. Many countries have made great strides to improve their medical supply chain capabilities, infrastructure, and efficiencies. However, the lack of local supply chain education and insufficient human capital management capabilities have prevented these supply chains from achieving their full potential.

People that Deliver (PtD) was founded to raise the profile of supply chain human capital needs. The mission of PtD is “to build global and national capacity to implement evidence-based approaches to plan, finance, develop, support and retain the national workforces needed for the effective, efficient and sustainable management of health supply chains.”¹ To this end, it was important to find organizations that have a similar mission to get a better gauge on how others are dealing with human resources in health supply chain management to ensure an effective, efficient, and sustainable supply chain is established.

In that light, PtD pursued the development of case studies that document how public and private sector organizations successfully manage the human capital in their supply chains. This report includes the first two of these case studies for Imperial Health Sciences and Central Medical Supplies Public Corporation (Sudan). PtD intends to continue developing case studies to offer the broader community examples of human capital management that they can adopt to improve supply chain execution.

¹ <http://www.peplethatdeliver.org/content/vision-mission>, accessed September 15, 2014

Methodology

A series of interviews were conducted in order to get in depth insight on how effective and efficient each organization was with human resource issues in the supply chain. The interviews also shed light on how agile the organization was when confronted with rapid change as well as documented best practices and areas for improvement. The results of each interview are placed into five separate areas of focus as outlined by PtD²:

- Engaged Stakeholders,
- Optimization of policies and plans,
- Workforce development,
- Increase performance, and
- Professionalization of SCM.

A copy of the interview guide that was used to build these case studies is included in Appendix A.

About the Organizations

Imperial Health Sciences (IHS) is a South Africa based third party logistics (3PL) firm focusing on the distribution and management of health commodities along with other commodities. IHS is a global firm with an operational focus in Africa. IHS's operations span from coordination with manufacturers to retail services.

Sudan Central Medical Supplies (CMS) is the government of Sudan's primary procurement and distribution organization for healthcare supplies for its citizens. Sudan CMS is a parastatal organization with autonomy to manage its operations under management of the government. CMS employs about 400 people who manage procurement, warehousing, planning and forecasting, and transportation of medical commodities.

Case Study Organization

The case studies are presented in this report as one section for each of the five focus areas for each organization. This organization allows for easy identification of practices within each focus area and comparison of focus area practices across organizations.

² These are described in more detail here:

<http://www.peoplethatdeliver.org/sites/peoplethatdeliver.org/files/1%20WHAT%20is%20an%20HR%20for%20SCM%20ap%20proach%20Jan%202014.pdf>

Imperial Health Sciences: Engaged Stakeholders

IHS is a logistics and supply chain services firm. As such, IHS must be responsive to their customers while maintaining efficient operations. These requirements lead IHS to focus on key stakeholder groups, ensuring that the workforce supports stakeholder needs. The priority of IHS is above all, having a productive and happy workforce. Without this, efficiency can be greatly decreased. In order to facilitate that, IHS takes great steps to ensure different cultural perspectives and unique requirements are considered when dealing with different stakeholders.

The primary stakeholders within Imperial Health Sciences are the HR Department and all of the external clients. The HR department is responsible for ensuring that staffing meets internal capability and cost needs as well as future growth needs. At the same time, the IHS staff exists to serve client needs, and ultimately, the clients dictate what skills and competencies are needed. Since these two stakeholders have different roles and perspectives, the supply chain managers interact with them differently.

The functional supply chain managers within IHS are responsible for helping the HR group develop, manage, and update an HR strategy for the company. This strategy includes the skills and competencies needed, training and career growth opportunities provided, and workforce cost targets desired. Working closely with the HR department helps supply chain managers ensure they have the personnel needed and allows them to quickly change their skills mix as client needs change.

Engagement with all stakeholders occurs on a daily basis. HR in supply chain management is the top priority of stakeholders. IHS recognizes that improved communication with stakeholders and being more responsive to stakeholder inquiries would improve the relationship between supply chain managers and the stakeholders, and IHS is working to improve these processes.

Imperial Health Sciences: Optimization of Policies and Plans

IHS has a comprehensive supply chain strategy that is maintained by the HR General Manager. It is also incumbent upon the HR General Manager and her entire department to ensure that the desired results are attained. The strategy is updated annually and covers employee wellness, benefits, equity, and learning and development. Supply chain managers work closely with the HR department to shape the strategy and ensure that the HR strategy aligns with operational objectives.

In addition to a supply chain strategy, IHS has published supply chain HR policies that are maintained by the HR department and updated at least every 2 years or more often if a change in the policy is required. HR is also in charge of ensuring compliance and adherence to the policies. Some of these policies are specifically to address local requirements in the places where IHS works. Examples of these policies include:

- Culture Orientation
- Apprenticeships
- Learning and Development Reporting
- Compliance
 - Black Economic Empowerment
 - Skills Development
 - Affirmative Action
 - Skills Levy Acts
- Graduates

Policies and strategies are consistent across the entire organization and are communicated and trained to the employees regularly. The policies are aligned to the HR supply chain strategy and are reviewed and revised as needed.

The HR Department is responsible for setting and maintaining budgets each fiscal year. If needed HR budgets are adjusted up or down during the course of the year, usually tied to outside factors that cannot be controlled. These factors include changes in client needs and volume as well as regulatory changes.

Imperial Health Sciences: Workforce Development

IHS's HR strategy guides their workforce development activities. IHS has determined how many people they will need in the future as well as the types of jobs each will perform. Each job has a job description that is reviewed bi-annually and aligned with key performance indicators (KPIs). "Scarce and critical" skills have been identified as well and include logisticians and pharmacists.

In order to fill those critical needed skills, IHS mostly looks to the web and internships as recruiting resources. However, the hiring of those people is completely dependent on the workload of new clients. Additionally, each person is trained in multiple disciplines in order maintain a lean workforce and allow for flexibility to shift personnel as functional needs change due to seasonal needs or client changes. Employees training and development goals are established by their direct supervisors and are communicated through bi-annual reviews.

IHS has created an in depth mentoring plan where employees mentor more junior staff on the requirements of their job. This serves primarily as a form of on-the-job training. Should someone leave the company, the mentee should have the skills to step into that role and ensure there are no gaps in capabilities or knowledge.

IHS trains on standard operating procedures (SOPs) weekly. This frequent training reinforces the procedures themselves as well as the importance of following them. It also allows for employees to offer suggestions for improving the procedures.

There are budgets each fiscal year for training, workshops, conference, certifications, and other developmental activities. In addition, employees are compensated for their training time as well as for tuition, conference fees, and other development activities. Each business unit is allowed to spend their money (from the Learning and Development budget) in the way that they see fit.

Imperial Health Sciences: Increase Performance

Reviews are conducted on a bi-annual basis by direct supervisors. Direct supervisors are also the people that approve increases or adjustments to salaries. Employees are offered a way to appeal their performance reviews if they disagree with them. They may appeal to the head of HR who will promptly take up the matter.

In order to increase employee performance, there is a bonus an incentive pay pool that is tied to achieving growth goals. As a part of an employee's review, they are evaluated in three categories:

- Skill (can they do the job?)
- Hill (what are the specific barriers to improving?)
- Will (does the employee have the will to complete the job and get better?)

The only tenant of the evaluation metrics that is not negotiable is "will." If an employee has no "will," then termination is considered. These three categories are weighed together to determine if the employee is eligible for a bonus and, if so, the amount of the bonus. This approach encourages employees to put forth their best efforts and continue growing their capability.

Salary, which is an important to increasing performance, is tied to education, the amount of relevant certifications, and seniority. There are clear criteria for career advancement which is outlined in the Learning and Development documents that can be accessed by all employees. Additionally, there are weekly communications with the employees on development opportunities.

There is also a "Thought Leadership Award" for going above and beyond the call of duty. This award is given to employees that develop innovative solutions that benefit IHS and its clients or to employees that show extraordinary effort in their job.

IHS would like to be able to know if an employee is facing personal issues that are impacting their performance. Currently, the company is not able to capture that information, but it would provide additional support to employees of the company could take action to alleviate personal struggles (such as financial difficulties) to allow the employee to focus more on their work.

Imperial Health Sciences: Professionalization of SCM

IHS encourages networking with professional organizations and other industry groups as a way for employees to grow their capabilities. IHS supports involvement with professional organizations by partnering with universities and other important players within the community of practice.

Membership fees, resources, and the opportunity to travel and take on leadership roles within an outside organization are customarily supported by IHS. This encourages employee involvement and leadership, which, in turn, brings greater skills back to IHS.

Sudan CMS: Engaged Stakeholders

CMS stakeholders are regularly engaged and provide staff in their areas of expertise. In addition to augmenting staff, stakeholders also provide funds for procurement and a budget for the distribution of medicines to health facilities. Stakeholders also expect efficiency and effectiveness with respect to employing relevant supply chain practices specifically because CMS handles a significant amount of health products.

As a government organization, Sudan CMS has multiple stakeholders that it must work with.

The primary stakeholders for CMS are:

- Ministry of Health
- Ministry of Finance & National Economy
- Central Bank of Sudan
- Directorate of Customs
- National Medicines and Poisons Board
- Minister of Justice for Legal Advisor
- National Health Insurance Fund
- UNDP and development funders

Of these, the Ministry of Health represents about 75% of CMS sales. The other stakeholders are involved in funding, procurement, distribution, and other essential activities. CMS was created as a parastatal organization to allow it to, among other things, have more autonomy over its workforce policies and compensation. The stakeholders that sit on the CMS Board, including the Ministry of Finance and Ministry of Health, approved approximately \$800,000 in funding for CMS workforce training for 2014.

Stakeholders are engaged regularly. Some stakeholders provide staff in their functional areas to support CMS activities. Some also provide a budget for distribution of medicines to health facilities and for procurement. As a result of these activities, the supply chain workforce is very important to stakeholders as compared to other business priorities. Stakeholders expect to see improved efficiency and effectiveness and less inventory loss due to wastage and expiration of vaccines. Progress is readily demonstrated through improved commodity availability. A staff development project, started in 2012, aimed to address HR in SCM challenges.

Stakeholder relationships can be improved by improving CMS efficiency in support of public health objectives. There is currently a plan that will improve medicine demand planning and order management through greater use of information systems and e-commerce. This plan also includes consideration for outsourcing transportation activities and improving cold chain transportation capabilities.

Recently, Sudan CMS funded an outside evaluation of their operations that produced a five year plan of action for improving efficiency. CMS has shared this report with stakeholders to secure the resources needed to make improvements and to share CMS's long-term improvement goals. CMS has been able to demonstrate clear improvements in their performance, specifically reduced inventory waste and improved availability. Most of the improvements can be tied to better training.

Sudan CMS: Optimization of Policies and Plans

In 1991, CMS became a parastatal organization under the Organization Act which let CMS use its own management capabilities within the current government of Sudan. To achieve CMS's strategic goal of supporting the national Procurement and Supply Chain Management System, CMS signed a contract with fourteen other states that agreed to consolidate their medical supplies into one establishment called the Medical Supply Fund (MSF). This action greatly optimized the policy and plans already in place laid the groundwork for other activities to improve supply chain management and improve capacity building.

CMS has a supply chain strategy that is updated annually by the Director General. It covers all internal operations, including workforce management and development. In the strategy, the workforce needs and plans are tied to overall organizational objectives and resource availability. The strategy includes workforce training plans and overall staffing plans.

CMS's status as a parastatal organization also allows them to develop their own workforce policies and not necessarily have to follow standard government workforce policies. This allows CMS to be more flexible in their policies and how they manage employees.

Sudan CMS: Workforce Development

CMS struggles with training staff to prevent outdated information systems, inefficient product management and product stock outs. CMS recognizes that in order to mitigate the threat of an insufficiently trained workforce, it is imperative to ensure employees are empowered to make decisions and are highly motivated and highly skilled across a variety of logistics functions. To this end, the National Supply Chain Training Centre provides solutions to HR problems through training, workshops, and transfer of knowledge.

Currently, Sudan CMS has approximately 400 people on staff. CMS has not determined how many people they will need in the future and what their exact roles will be. CMS recognizes there are critical staff deficiencies (pharmacists, engineers, accountants) and is looking at ways to mitigate the threat of not having enough specialists. A breakout of the CMS staff is shown in table 1.

Table 1: Sudan CMS Staffing

Professionals	Number	%
Pharmacists	59	15%
Engineers	26	7%
Clerks	44	11%
Auditors	7	2%
Accountants	37	9%
Technicians	17	4%
Typists	17	4%
Civil defence	15	4%
Others	175	44%
Total	397	100%

In order to help CMS combat training deficiencies, it developed a National Training Center to train employees on medical supply chain, basic business administration, and bio-engineering. CMS also has a memorandum of understanding (MOU) with Leeds University to determine training gaps and identify future capability needs.

Directors record employee performance annually in order to give feedback. However promotions are based primarily on seniority rather than by performance.

Sudan CMS: Increase Performance

Sudan CMS has demonstrated improved supply chain performance through better workforce training and management. Specifically, CMS has established a national training center and developed a mentoring program for supply chain staff.

The creation of the National Training Center aims to increase employee performance by bridging the education and training gap. The National Training Centre was developed to train employees, especially Pharmacists in Sudan and other developing countries, so that they will become effective employees in the public and private sectors. Additionally, CMS looks to emphasize the importance of managerial qualities such as capacity building and knowledge of concepts such as planning, the managerial process, leadership, and quality control.

In addition, the following short courses on health are made available to increase knowledge and performance:

- Medicine supply (Selection, Procurement, Distribution and Use) management.
- Quality assurance in medicine supply system.
- Financial Management and accounting.
- Personnel planning, development and management.
- Drugs and therapeutics committees.
- Rational use of medicines.
- Inspection of wholesalers, manufacturers and pharmacies.
- Time management.
- Pharmacoeconomics.
- Planning, Monitoring and Evaluation of business.
- Human Resources Management within big business organisations.
- Leadership and organisational Change Management.
- Project Management in Health Care.

Sudan CMS recently started providing training to senior staff on mentoring techniques in order to start mentoring activities. Since this program has only recently started, the specific process and activities are not established.

Sudan CMS: Professionalization of SCM

CMS encourages networking with other professionals including the Sudan Pharmacist Union and the Sudan National Board for Medical Specializations. CMS employees have been active in these organizations, and CMS has also been active in supporting the organizations and their programs. For example, CMS will use their reputation to negotiate with universities and companies to work with a professional organization to create training programs.

Other efforts to professionalize SCM at CMS include:

- Performing research related to the medical supply chain
- Train and educate individuals at other organizations
- Developing an ethic of continuous process improvement

Appendix A

Case Study Interview Guide

Building Block 1: Engaged stakeholders

Building a strong relationship and foundation with stakeholders is an important pillar to performing meaningful work that can endure and impact your target audience. Consider these questions when working to establish a better relationship with stakeholders:

- Who do you consider to be your primary stakeholders in effective supply chain personnel management?
- How often and how do you engage with your stakeholders?
- What resources or other support do your stakeholders provide?
- What are the priorities of the stakeholders?
 - How important is HR in SCM to your stakeholders compared to other SCM or business priorities?
- What metrics do your stakeholders expect to see improve through better SCM HR management?
- What are some of the cultural norms and practices that must be taken into account when dealing with different stakeholders?
- How do you think you could improve your stakeholder relationships?

Building Block 2: Optimise policies and plans

Plans and policies that link HR management to strategic objectives for the supply chain and the business are essential for developing personnel capabilities that improve supply chain performance. Consider these questions about your HR policies and plans:

- Do you have a supply chain HR strategy? If so:
 - Who maintains it?
 - How often is it updated?
 - What topics does it cover?
 - Who is responsible for achieving the strategy?
- Do you have written supply chain HR policies? If so:
 - Who maintains them?
 - How often are they updated?
 - What topics do they cover?
 - Who is responsible for ensuring policy compliance?
- Who sets HR budgets (salaries, training, safety equipment, etc.)?
 - How are budgets related to strategy and policies?
 - What is a typical budget cycle?
 - How likely is it that HR budgets will be adjusted up or down during the budget year?
What triggers these adjustments?
- Are the strategy and policies consistent across organizational units?

- How are the policies aligned to the strategy
- What metrics are used to measure HR performance

Building Block 3: Workforce development

In general, it is less expensive to grow employees in their careers than to hire from the outside. Consider the following questions about your workforce development plans and programs:

- Has the organization determined how many people you need and what their exact roles will be? (This will ensure each person has meaningful work).
- Is the organization documented complete with reporting and management responsibilities? Does each role have an up-to-date job description?
- Is there an established budget for training, workshops, conferences, certifications and other professional development activities?
 - Are there resources for finding development opportunities?
 - Are people compensated for time used for training and development?
 - Are people compensated for tuition, conference fees, and other development expenses?
- Are employees provided with training and development goals? Who develops these goals? How are they communicated?
- Is there currently a plan/schedule for recruiting?
- Has a plan been created that projects how many SCM professionals you will need in the future?
 - What specific skill sets are you looking for?
 - What resources do you use for recruiting (e.g., schools, trade publications, web sites, etc.)
- How will you continue personnel growth and professional development?
- Are there transition plans in place for SCM professionals that will leave the company so there is no knowledge gap?
- Is there a defined policy for bonuses/incentive pay? Are incentive payments tied to achieving growth goals?

Building Block 4: Increase performance

Continually increasing performance is the key to building a workforce that continually grows and can sustain excellence. Consider the following questions about your performance programs:

- Describe the current performance review programs.
 - How often are reviews conducted?
 - Who conducts the reviews?
 - Who approves increases or other adjustments to salaries or incentive payments?
 - How can employees appeal performance reviews?
 - As part of reviews, are employees given a plan to improve performance and advance their career?
- What metrics or other factors are used to judge employee performance?
 - How are these collected?
 - What metrics or factors do you wish you could use but are not available?
- Is salary linked to education, certifications, seniority, or other factors?
- Are there clear criteria for career advancement?
- Do you have a formal mentorship program?
 - Who manages this?
 - How are mentors selected?
 - How do employees participate?

Building Block 5: Professionalisation of SCM

Producing a culture of excellence and professionalism is important in order to propel an organization forward. In encouraging professionalism, consider the following questions:

- Do you encourage networking with professional organizations and other industry groups?
- How do you support involvement with professional organizations?
 - Financially support membership fees?
 - Provide in-house resources for participation?
 - Host organizational meetings?
 - Encourage employees to participate with specific organizations? Which ones?
 - Others?
- Do you provide time and resources for employees to take on leadership positions with professional organizations?
- To you support travel expenses to professional organization functions?
- What minimum or desired education standards do you have for supply chain management positions?
- How do you support local supply chain education or certification programs?
- How do you support employees in receiving the education needed for their career advancement?