



Reform of the National Health Supply Chain in Sudan: dedicated to those who work hard to get essential quality medicines to patients

DR GAMAL KHALAFALLA & DOMINIQUE ZWINKELS





Effective supply chains require a sufficient number of motivated, competent and skilled staff to fulfil essential supply chain functions. Public health supply chains are no different. However, in certain countries in the world, these skills are put to the test more than most when infrastructure challenges, adverse weather conditions, epidemics and major health concerns are at play. In 2016 the People that Deliver Initiative, together with multiple partners, was instrumental in garnering support for the National Medical Supplies Fund (NMSF) in Sudan. NMSF recognised that by investing in education for its people, this will lead to more efficiency and cost effectiveness in the supply chain of health commodities and will sustain the NMSF mission to ensure access to quality essential medicines and commodities at all times. Join Dr Gamal Khalafalla Mohamed Ali, the Director General of NMSF and Dominique Zwinkels, Executive Manager of the People that Deliver Initiative, to see how the donor community, private sector and exceptional local leadership can create effective supply chains in one of the most challenging environments.

SAPICS White paper

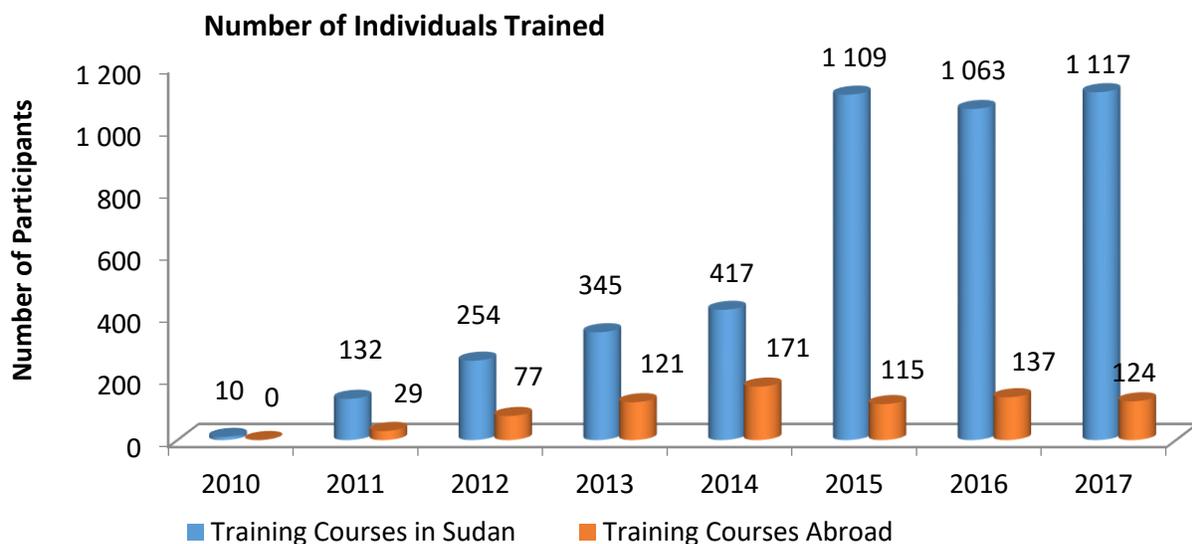
Title: Reform of the National Health Supply Chain in Sudan: dedicated to those that work hard to get essential quality medicines to patients

The title without a doubt reflects what the National Medical Supplies Fund (NMSF) in Sudan holds very dear; it recognizes continuous professional development, and investing in its workforce, as key to securing high quality, efficient and safe medical supplies. An effective public health supply chain requires motivated and skilled staff with competency in various essential logistics functions, including staff that have been empowered to make decisions that positively impact availability of health supplies and health outcomes. NMSF, as a leader in the procurement and distribution of medical supplies, fully recognizes that its success and reform are achieved through people's expertise, and that appropriate training and development is key to the success of its reform. NMSF also understands that with the ability to recruit, develop, retain and advance its workforce, will put NMSF at a competitive advantage in their ability to innovate, create value for customers, and improve supply chain performance.



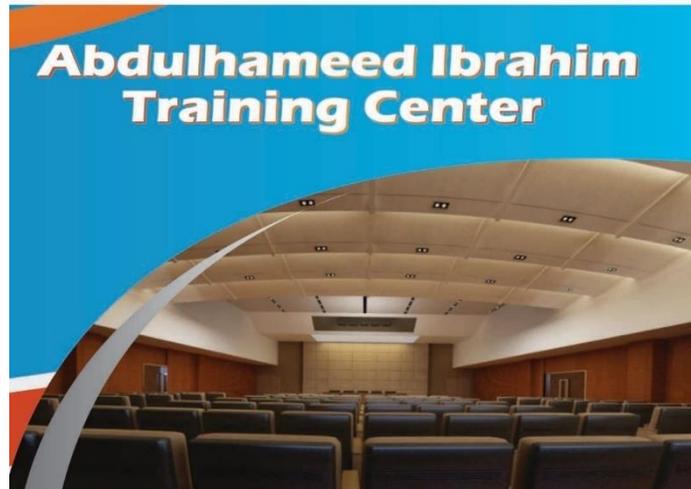
NMSF is Sudan’s national agency for procurement and distribution of medicines, and operates as a parastatal organization serving the state indirectly, under the supervision of the Federal Minister of Health. Its mandate, as set in its Act of 2015, is to ensure that essential medicines and medical supplies of proven safety, efficacy and quality are available at reasonable prices to the population using public health facilities. While the focus of NMSF is to supply the public sector, it also serves the private sector. Due to economic sanctions imposed on the country in 1997 and the secession of South Sudan in 2011 which affected the availability of foreign currency, NMSF has been relentlessly challenged over the years by poor access to convertible currency and international banking transactions. However, with commitment of the Central Bank of Sudan to secure the hard currency (which also reflected commitment by the government) NMSF had access to hard currency at official rates. This allows a regular supply of internationally-procured medicines.

In 2011 NMSF embarked on a reform process which significantly changed the way NMSF operated its medicine supply system, improving geographical, physical, and economical accessibility to quality medicines and other health commodities. An investment of \$34 million established NMSF’s 16 branches, e-procurement, online sales, procurement of registered medicines, and much more. Availability of medicines in NMSF’s warehouses increased from 43% in 2009 to 75% in 2012, with annual averages at around 95% since 2013. NMSF sales jumped from \$69 million in 2010 to US\$ 99 million in 2012 and shooting up to US\$ 225 million in 2016. Online sales were a completely new development for the country and by 2014 represented over half of the NMSF’s sales. And finally, the annual number of trained employees increased from 10 employees to over 1,200 in 2017, with an annual training budget of over \$400,000 in 2018. NMSF also embarked on a bold project of constructing a grand purpose-built supply chain training centre on its premises in Khartoum, Sudan, above NMSF’s main warehouse. The “Abdulhameed Ibrahim Training Centre” which opened in April of 2017, has the capacity to accommodate training interventions not only for NMSF’s own staff but also for external public and private organizations. It is envisaged that the NMSF training centre will grow to become a regional Centre of Excellence in supply chain management. The centre comprises four well-equipped training halls, a library furnished with hard and electronic learning resources, VIP meeting rooms, and offices.





Federal Ministry of Health
National Medical Supplies Fund



NMSF has a flexible organizational structure, which combines public sector objectives with private sector style management. The management systems at NMSF were approached from a strong business perspective, as was recommended by Cross and others (1986, p.337), who stated ‘...it is important that government officials and other individuals involved in establishing a revolving drug fund view the fund more as a commercial operation than a public service’. NMSF needs to be commercially oriented to meet its objectives of recovering medicines costs and raising sufficient revenues to become self-financing and viable. NMSF aims to become an efficient and cost-effective organization, while adhering to its public objective of operating in the best interest of the Sudanese population. A key element of achieving this objective is to develop and maintain a motivated and engaged workforce. Most of the NMSF staff are civil servants, governed by public service's laws and regulations. This means that NMSF has only limited influence on the selection of its personnel, their qualifications, and experience. However, NMSF's status as a parastatal organization allows it, to some extent, to develop its own workforce policies without necessarily having to follow standard government workforce policies. This has allowed NMSF to be more flexible in its approach to staff management and development. NMSF currently comprises 435 employees, range from highly skilled technicians (mainly pharmacists) to laborers. In addition, there are information technology and biomedical engineers, administrators, accountants, and storekeepers.

NMSF joined the People that Deliver (PtD) Initiative Board of Directors in 2013. PtD was established in 2011 to respond to widespread and systemic weakness within the management of health supply chain human resources in the developing world. PtD's mandate is to strengthen the capacity of supply chain personnel while promoting the professionalization of the supply chain role within the overall health system. This initiative is based on the global recognition that without trained professionals to manage the health supply chains, drugs and other health supplies do not reach the patients who need them. The global partnership now consists of more than 250 organizations that are working together to provide a coordinated, multi-organizational approach to addressing human resources for health supply chain management. PtD is governed by a Board of Directors of 23 organizations representing governments, donors and aid agencies, NGOs, academic institutions, professional associations, and private sector organizations.

In 2016 PtD established the Country Partnership Program, where PtD provides a service offering that supports Ministries of Health, NGOs and implementing partners to plan, implement, and sustain reforms which strengthen human resources for the health supply chain. NMSF was the first recipient of this program and through this collaboration a comprehensive human resource for health supply chain strategy and operational plan were created for the development and retention of NMSF's supply chain workforce, supporting the newly built Abdulhameed Ibrahim Training Centre in Khartoum. The methodology for developing this strategy and plan was based on PtD's Four-Stepped Approach to human resources capacity development:



The PtD-NMSF collaboration produced several outputs:

- A strategy that included a five-year costed training plan based on a comprehensive training needs assessment,
- improved on-boarding of new staff by way of a mentoring and coaching program,
- linked training interventions to individual job descriptions and performance,
- a new performance management system,
- an HR policies and procedures manual,
- career paths for all supply chain functions.

The training strategy sets out the program for a five-year period, based on guiding principles that include the principles of continuous improvement and competency-based learning. The costed annual training plan is an implementation of the training strategy and contains a detailed calendar of training activities with indication of the preferred training methodology for each training intervention. Training interventions were costed according to the appropriate training methodology.

An important step in the PtD-NMSF collaboration was the development of the NMSF competency framework. It sets out the technical, managerial, organizational and personal skills that staff at headquarters and state level within NMSF are expected to have. The training interventions developed for

NMSF are geared towards competency-based curricula and training plans. The framework also includes a professional competency profile for every post in the organization. It complements the PtD Health Supply Chain Competency Framework for Managers and Leaders and ensures that each activity can be undertaken to a required level depending on the post. The PtD framework does not outline particular cadres or job titles (i.e. warehouse manager, dispensing officer, etc.), but rather supply chain functions. Functional areas typically reflect a defined task or set of tasks for either one person or a dedicated team of persons. Increasingly, within the public health sector, stakeholders are beginning to focus on workload modelling to determine the number of staff required within a system design approach. This approach can lead to a rethinking of the types and numbers of staff needed to manage logistics tasks. The competency framework helps align roles with supply chain requirements (job descriptions), can be used as a source document for the development of career pathways for those entering the organization (training and career development), and assists managers who are building or restructuring their functions (organizational development and recruitment).

NMSF Sudan's case highlights the importance of vision and leadership within the pharmaceutical supply chain function at country level. A strong leadership function has resulted in a committed and motivated workforce operating within a conducive work environment. Equally important is the awareness among senior managers of the need for continual improvement within all sections of the organization. A prime example of this is the new training facility, which will ensure that continuous capacity development of the workforce remains a priority.

Authors:

Dr Gamal Khalafalla, Director General, National Medical Supplies Fund, gamalkh@nmsf.gov.sd

Dominique Zwinkels, Executive Manager, People that Deliver Initiative, dzwinkels@unicef.org



Dr Gamal Khalafalla Mohamed Ali is qualified as a pharmacist from Khartoum University, where he also did his PG diploma in health economics. He has an MSc in pharmaceutical services and medicines control from University of Bradford, UK. Gamal has finished his PhD in 2006, in the Nottingham Trent University-UK. He has over 25 years working as a pharmacist in medicines supply management and regulatory authority in Sudan. It was within this period (1992 to 2017) that he worked as a manager for RDF in Khartoum state, Ministry of Health. Then he shifted to the Federal Directorate of Pharmacy as a manager for Pharmaceutical services and planning department. In November 2007, he has been appointed to be the secretary general of the National Medicines and Poisons Board, the Medicine Regulatory Authority of Sudan. He has developed measures for efficient supply chain and stock level control at all levels across Khartoum State, as well as proactively advocating establishment of the Revolving Drug Fund in different states of Sudan.



Dominique Zwinkels is the Executive Manager of the People that Deliver Initiative (PtD). She is an international development professional with 20 years of experience in designing, developing, managing and evaluating projects with a focus on the HIV/AIDS supply chain, livelihood and food security, and nutrition. Since 2016 Dominique has been responsible for the management and overall performance of PtD, a broad coalition of governments and international, regional and national organizations working together to raise the profile of supply chain management as a key strategic function of health systems, and promote and support sustainable workforce excellence in health supply chain management.