



Outsourcing Study for Drug Distribution in Nigeria

Project Location:	Nigeria
Project Start Date:	2010
Project Duration:	6 Months

Introduction: A significant proportion of the procurement and distribution of essential drugs in most countries in sub-Saharan Africa is done by the Ministry of Health (MOH) or a parastatal agency closely linked to the Ministry of Health. The drug distribution needs within a country, however, usually overwhelm such drug distribution logistic systems along one or more performance dimensions. Outsourcing some functions or sections of the supply chain may provide options for improving performance.

In 2010 Transaid, working with MIT Zaragoza Programme and VillageReach embarked on a DFID funded project to evaluate the feasibility of outsourcing various elements of the pharmaceutical supply chain in Kano State, Nigeria. While the project focussed on a variety of areas (including warehouse, requisitions and human resource) this technical case study focuses pre-dominantly on the transport element of the project.

The purpose of the project was to develop a set of tools to model the potential cost and performance of options for contracting out components of public sector pharmaceutical supply chains (warehousing, transportation and distribution). The basis of the tool development was an analysis of the performance of the supply chain for the drug revolving fund (DRF) system for essential drugs serving primary health care (PHC) and secondary health care (SHC) facilities in Kano, Nigeria.

Specifically Transaid's work was focussed on understanding the following:

- Costs of distributing medical goods to PHC & SHC facilities in Kano, Nigeria from the state medical stores;
- Performance potential and cost of third party logistics providers to distribute essential medicines through the health system; and
- Outsourcing opportunities in public distribution systems of essential medicines from the state level down to the last mile.

Methodology: Over a four-week period, a field consultant visited Primary Health Centres (PHCs), Secondary Health Centres (SHCs) and the Drug Management Agency (DMA) for data collection purposes focused on operations in 2009 and 2010. From the 100 or so PHCs within the DRF the team chose 10 to visit. The 10 facilities were chosen based on a number of factors including the classification of the PHC (dispensary, health post, basic health centre, primary health centre), proximity to the DMA and proximity to a paved road.

To determine 3PL capacity the team used a survey approach similar to that used for assessing the state run drug distribution system. These surveys generated an assessment of 3PL capabilities and elicited potential costs for their services. Pledges of anonymity were used where necessary to elicit information needed from 3PL providers.

Outcomes: The assessments of the DMA's capacity to operate an efficient distribution fleet highlighted a number of opportunities for improvement:

- **Policy:** There was no transport policy available at the DMA, the development of a comprehensive policy will help ensure alignment among staff and stakeholders regarding the use of DMA vehicles.
- **Operational Management:** An individual is assigned as responsible for the management of transport (the Director of Administration and General Services), a deputy/cover is available and transport is discussed as an agenda item during management team meetings. Procedures however are not documented. Trip authorities to monitor the movements of vehicles are used. Vehicles are not equipped with log books, however up to date vehicle files (which include information such as maintenance records and ownership documents) are available. Currently no formal vehicle planning routine is in place; neither for operations or for maintenance.
- **Fleet Management:** While a planned preventative maintenance regime was said to be in place, it was determined that the intervals between vehicle services were not appropriate and were often not adhered to. It was found that drivers undertook daily vehicle checks; however these were not documented or checked by supervisory staff.
- **Management Information:** Maintenance costs for vehicles are collated. However individuals responsible for transport do not have any performance targets (e.g. vehicle utilization, running costs or fuel consumption). Distribution performance indicators such as truck fill, on time delivery and damages are not recorded or analyzed. No safety records are kept.
- **Human Resources:** Job descriptions were not available for those responsible for transport or drivers. No training was found to have taken place regarding driver training, fleet management, maintenance, budgeting, health and safety or transport planning.

During the project, three third party transportation providers (Providers A-C) were assessed for their appropriateness in providing effective transport for pharmaceutical distribution. The key findings of the study are as follows:

- Private sector capacity is adequate to provide distribution services for essential drugs.
- A variety of providers are available. A cross section highlighted the difference between different types of

provider in terms of systems, processes, and strengths. For some distribution operations (such as bulk goods i.e. hospital beds) it may be more appropriate to use the services of Provider A while for small consignment multi drop distribution it may be more appropriate to use a specialist in this field such as Provider C.

- In-house 3PL management capacity requirements will vary greatly. Depending on the experience of the service provider, it is clear that varying amounts of 3PL management capacity will be required within the contracting party (e.g. the DMA) to manage the 3PL relationship.
- At the time of this report, only two transportation providers had submitted a mock Request for Quotations (RFQ). Provider B submitted their costs as a per kilogram contract (₦500), while Provider A submitted costs as a per roundtrip contract (₦28,000) for a moderate distance (50 – 100KM). Provider B's quote was considered competitive for less than full truckload distribution especially to PHCs but not for SHCs.

In terms of capability the DMA assessment showed good problem solving of transportation problems, no third-party logistics management capability and inadequate in-house fleet management capability at present. Meanwhile the capability assessment of transport 3PLs showed a range of fleet management capability from weak to good, a range of problem solving of distribution problems from weak to good and mixed capability for managing clients.

Conclusion: The key recommendation of the project was for the partial outsourcing of transport in order to improve distribution to PHCs with expected savings of at least 12.9% -19.6% on annual sales to PHCs. Essentially it was recommended that a 3PL transporter be contracted for ⅓ of PHC deliveries. One vehicle with a volume of 2.5 m³ (e.g. Toyota Hilux Pick Up) was calculated as being sufficient for the DMA to collect requisitions and manage deliveries to the remaining ⅔ of PHCs.

Outsourcing of distribution can be undertaken for a number of reasons; cost savings, seeking improved service delivery, or simply to allow an organisation to focus on its core competencies. However, there are a significant number of considerations to take into account when analysing the cost/benefit of outsourcing;

- What is the cost of the current in-house operation versus an outsourced option?
- How do you assess the capability of potential 3PLs? Fleet size, management capacity, experience, other clients?
- How will you manage 3PLs? What resource will be required? How should the contract be structured (by weight, volume, trip, delivery points, vehicle day etc.)? What Key Performance Indicators will be used to manage a 3PLs performance? How will conflicts be resolved? Should a Single Point of Contact be made available at the 3PL?
- What negative impact might outsourcing have on service delivery e.g. client contact, lengthened communication chains etc.?

Tools Utilised: The key tools used included Transaid's 3PL Capacity Assessment Tool (to assess the service delivery capabilities and capacity of 3PLs), Transaid's 3PL Management Capacity Tool (for assessing the ability of public organisations to manage 3PLs), Transaid's Transport Management Assessment Tool. Other tools used by the partners included transport costing surveys and warehouse costing surveys.

Partners: MIT Zaragoza Program, VillageReach, DFID, PATHS2.

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About Transaid:

Transaid is an international UK development charity that aims to reduce poverty and improve livelihoods across Africa and the developing world through creating better transport. Transaid was founded by Save the Children and the Chartered Institute of Logistics and Transport. Our Patron is HRH The Princess Royal. Transaid specializes in the following:

- Building the capacity of public health authorities to provide effective, safe and cost efficient transport management systems to promote equitable access to primary health care services.
- Developing and improving logistics and supply chain systems to enhance the delivery of medicines, equipment and relief services to vulnerable communities.
- Promoting effective partnerships to support and enhance community participation in developing sustainable transport solutions in rural areas.
- Developing and delivering transport and logistics training and qualifications for public and private sector operators.

Transaid has the capacity and reach to lead projects throughout the developing world, but is equally capable of providing niche technical assistance to large scale health systems strengthening projects. Transaid maintains strong relationships with a number of leading international organizations including donor agencies such as DfID, DANIDA and USAID, and implementing organizations such as Health Partners International, Options Consulting, John Snow Inc. and Management Sciences for Health.

Contact:

Transaid
137 Euston Road, London NW1 2AA
United Kingdom

t: +44 (0)20 7387 8136
f: +44 (0)20 7387 2669
e: info@transaid.org
www.transaid.org

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