



Malaria Commodity Distribution Assessment - Nigeria

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

Introduction: Very large amounts of time and money have been applied to strengthen medical supply distribution systems in low-resource countries. Progress has been made, yet many systems remain ineffective, inefficient and still not in a position to manage the increases in throughput required to meet the needs of the people these systems are designed to serve. An efficient and cost effective distribution system for medical commodities is key to ensuring sustainable coverage of resources for health programs.

In Nigeria, 97% of the population is at risk from malaria infection and a scale-up of malaria control interventions is of utmost importance. The Nigerian Government and National Malarial Control Programme set a goal to reduce malaria morbidity and mortality by 50% by 2013. Specific objectives have been set by the Global Fund to achieve this goal. These objectives demand that the Principal Recipients¹ greatly increase/scale up in their capacity of their systems to deliver health commodities. To build support and capacity within the government-run drug distribution system in Nigeria, it is necessary to understand the performance and costs of the current system, and opportunities to enhance efficiency within this system.

A team consisting of Transaid, VillageReach, MIT-Zaragoza Programme, and i+solutions was compiled to focus on Commodity Distribution Optimization. With combined expertise in last mile logistics, fleet management, and logistics systems modelling and optimization, the team produced a comprehensive assessment of Nigeria's commodity distribution system and recommended ways to increase efficiency in this system. The joint work included an assessment of the delivery and transportation system, an evaluation of the various distribution channels that may exist and their efficiency, recommendations on how to re-design the system for optimal performance, transfer of tools and systems to local partners, and creation of a monitoring and evaluation framework.

Methodology: Transaid conducted a full assessment of the delivery and transport system used for distribution of malaria-related health commodities. A team of experts (six local and one international expert) was compiled bringing experience in transport and logistics, distribution, and management information systems.

Transaid developed a methodology, focusing on the operations of the distribution system in four states, and utilizing Transaid's 'Operational Assessment' tools that have been developed and refined through work in more than 25 African countries over the past

15 years. Undertaken via interviews with key staff, including transport officers and transport users, the Operational Assessment quantitatively reviews the following components of a Transport Operation.

- **Situation analysis**
 - Vehicle inventory/fleet composition, vehicle requirements, replacement planning
- **Policy**
 - Documentation, understanding/dissemination, implementation, content
- **Operational Management**
 - Structure, procedures, authorities, documentation, planning and scheduling, controls
- **Fleet Management**
 - Vehicle selection, maintenance procedures, maintenance providers – in-house, maintenance providers – outsourced, task comparison and spare parts management, vehicle checks
- **Management Information**
 - Source data/documents, data analysis, information utilisation
- **Human Resources and Organisation**
 - Structure, job descriptions, training/capacity developed to date, future training plans, career/turnover, commitment, reward

The detailed data collection in the four key states was complemented by qualitative assessments throughout the remaining 33 States to determine the relevance of the models analyzed in the four key states. These states were chosen to represent the differing distribution models in operation: outsourced and in-house transport systems either utilizing or bypassing the state stores.

These activities were undertaken through extensive consultation with the Ministry of Health, and the principal recipients at central, state, LGA and service delivery points. Other stakeholders including 'Roll Back Malaria' (RBM) representatives were consulted as appropriate.

Below is a list of the activities which were undertaken:

- Collection of existing system data
- Analysis of system data and system reports
- Calculation of performance against key performance indicators (where possible)
- Analysis of fleet composition
- Completion of operational assessments with key regional/directorate staff
- Assess vehicle use, maintenance and replacement
- Assessment of outsourcing options
- Assessment of private sector service providers
- Identify barriers to service provision
- Review policy content
- Completion of management system review.

¹ National Malaria Control Programme, Society for Family Health & Yakubu Gowan Center

Following the completion of the Operational Assessment in the four states, and the qualitative data collection from the remaining 33 states, the data was collated and analysed. This focussed on the calculation of Key Performance Indicators to determine the operational efficiency of the transport system, and an assessment of performance against best practice distribution systems upon which the operational assessment is based.

Outcomes: The team concluded that despite significant challenges including short timeframes, a large number of delivery points, and budgetary constraints, the principal recipients (PRs) would be able to ensure successful distribution of the incoming commodities if prompt action was taken. This opinion was formed following the completion of more than 800 interviews, surveys and assessments throughout all 36 states of Nigeria plus the Federal Capital Territory. Stakeholders included in the assessment phase included PRs and sub-recipients (SRs), RBM managers, Central Medical Stores Staff, public hospital and health facility staff, private sector medical facility staff and private pharmacies.

Immediate weaknesses identified were dealt with through the provision of technical training for key operational staff within each of the PRs. Transaid delivered training on the topics of Fleet Management and Third Party Logistics (3PL) Management. As well as the training a series of recommendations were made:

Short-Term Recommendations:

1. Immediate communication of key Procurement and Supply Management (PSM) plan information to all stakeholders.
2. Develop state-by-state transport and distribution plans with PR logistics managers and SR representatives.
3. Identify specific distribution vehicles and obtain permission for their use.
4. Prepare and sign SR/sub contractor contracts according to state-by-state transport plans.
5. Implement state-by-state transport and distribution plans.
6. Develop standard operating procedures for distribution.
7. Establish monitoring tools to facilitate oversight of distribution activities in each state.
8. Improve existing record keeping practices.
9. Establish minimum and maximum stock level policies as part of the development of standard operating procedures for distribution.

Long Term Recommendations:

1. Development of a team of in-house logistical professionals within each PR.
2. PSM training and/or experience for management staff.
3. Engage in efforts to reduce staff turnover.
4. Revise the PSM Plan format to incorporate greater operational/logistical detail
5. Implement a comprehensive monitoring and evaluation plan for PSM activities.

Conclusion: Malaria is treatable only if patients can access treatment. In a country as large as Nigeria, with a large population, the logistical challenges associated with ensuring the availability of treatment at the health facility are significant. The completion of a distribution assessment prior to the arrival of health commodities can help identify problems and bottle-necks, highlighting areas that need investment or attention for the distribution to go smoothly.

In Nigeria Transaid identified a number of opportunities for the three PRs to improve their distribution plans and increase the efficiency of their operations, thus increasing the likelihood of success upon the arrival of the commodities.

Tools Utilised: Transaid Transport Management Systems Manual, Transaid Training of Trainers Manual

Partners: MIT Zaragoza Program, i+Solutions, VillageReach, Society for Family Health, Yakubu Gowan Centre, National Malaria Control Program

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.

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