



Improving iSC performance through outsourcing – Considerations for using third-party service providers to increase innovation, capacity and efficiency[☆]



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ABSTRACT

Development partners and donors have encouraged and incentivized governments in developing countries to explore ways of working with third-party service suppliers to reduce costs and increase service delivery capacity. The distribution of vaccines and medicines has for a long time shown demand for outsourcing but public health systems have struggled to develop the expertise and capital assets necessary to manage such ventures.

Existing transport and logistics capacity within public health systems, in particular, is well documented as being insufficient to support existing, let alone future immunization needs. Today, a number of countries are contracting party logistics providers (3PLs) to supplement the in-house distribution operations of public health systems. This commentary reflects on recent, leading examples of outsourcing initiatives to address critical gaps in transport and logistics.

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Across sub-Saharan Africa, tens of thousands of health centers serve rural communities; many are located hundreds of kilometres from regional facilities supplying vaccines and related supplies. To effectively reach children with vaccines, well-managed transport is a critical component of the supply chain. But for many health systems in the region, current practices and resources are inadequate to ensure reliable and sustainable transport support the distribution of vaccines and other medical commodities.

In Mozambique, a country of 800 km² where 80% of roads are unpaved, the ministry of health – known in country as MISAU – coordinates the distribution of approximately \$10 million of vaccines annually from two central medical stores, through 11 provinces and 148 districts, to more than 1700 rural health centers. It is not uncommon for commercial transporters to help enable delivery from the highest levels of the vaccine supply chain through to the first levels of the supply chain in countries like Mozambique. MISAU has made annual payments of as much as \$1 million to commercial logistics service providers (LSPs) to distribute health commodities from the country's main ports to provincial stores.¹

Such outsourcing is rare to support distributions to rural health centers, though this is starting to change as the private sector develops in sub-Saharan Africa. The African Development Bank (AfDB) notes that "... Africa's economic growth continues to be driven by the investment in the infrastructure needed to extract and transport these resources to global markets ..."² The AfDB estimates that nearly 45% of the private sector workforce in Mozambique is employed by small-, medium-sized enterprises (SME).³ Transport has been under-represented among SMEs at 4% of total gross revenues for the small-enterprises overall, but as rural development progresses we would expect more small-scale regional and district-based 3PLs will be launched to address growing demand for freight transport.

As private LSP capacity increases, we see more partners interested in experimenting with innovative outsourcing solutions in public health and beyond. Health system managers generally seek to increase their capacity to serve, while simultaneously working to lower the cost of delivery. Outsourcing allows for a focus on core skills related to the provision of clinical care and helps de-prioritize

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¹ "Evaluation of Health System Transport Capacity and Demand." VillageReach, 2014.

² Supporting the Transformation of the Private Sector in Africa. Private Sector Development Strategy, 2013–2017. African Development Bank, 2013.

³ Republic of Mozambique: Country Strategy Paper 2011–2015. African Development Bank, 2011.

the development of non-core skills and functions. Engaging external service providers is intended to reduce the overall cost base of operations and increase the level of expertise and innovation applied to these non-core functions. However, through our work we frequently hear concerns about engaging external parties. These fears typically relate to the perceived higher costs of working with a professional service provider, ensuring quality of service (QoS) standards are maintained, and the challenges in integrating staff and responsibilities of government with those of an outsourcing service provider.

Two recent examples, one in Mozambique and another in Nigeria, demonstrate the process governments have undertaken to consider outsourcing as a potential solution. In 2013, provincial health authorities in Tete in northern Mozambique faced a number of constraints limiting effective management of its transport fleet, preventing delivery of vaccines and other commodities to health centers. The poor conditions of rural access roads were impacting transport capacity and reliability through severe wear and tear on vehicles and a high incidence of accidents. Moreover, the capacity of the provincial health authority to respond to such challenging environments was also limited. Insufficient spare parts and high costs for maintenance prevented a dynamic approach to maintaining transport fleet capacity.

To address this problem, government health officials in Tete collaborated with VillageReach, Medecins Sans Frontieres and a local 3PL to outsource the distribution of vaccines and antiretrovirals to rural health centers, serving a population of more than 1.5 million. KPIs were established for both the 3PL and the ministry of health, and an agreement signed by all parties focuses strict adherence on success factors. The ministry of health and the 3PL are together accountable for the successful delivery of commodities: penalties can be charged to the 3PL for incomplete distributions or improperly collected data for documenting distributions, while the 3PL is permitted to charge additionally for significant delays it faces due to the ministry of health not living up to its obligations. This includes ensuring adequate stocks are available for agreed distribution schedules.

Results from the initiative in Tete have been encouraging. An assessment of the first six months of operation revealed a direct correlation between an improvement in the reliability of the distribution and the availability of vaccines and ARVs at health facilities [1]. The 3PL has reduced distances traveled by as much as 40% and distribution times to health centers by more than 50% by adopting routes that cut across conventional district supply chain paths [1]. And health centers report greater visibility in anticipating the availability of commodities, resulting in improved stock management planning.

Similarly in Nigeria, the Kano State government partnered with the Dangote Foundation and the Bill & Melinda Gates Foundation to improve vaccine distribution and supply chain management. Following a government-managed RFP process, a contract for outsourced distribution directly to health facilities was awarded to eHealth Africa, an NGO which beat out a number of private sector LSPs. Vaccines are now transported directly from state or zonal cold stores to an estimated 300 health facilities in fully-monitored cold chain vehicles. eHealth Africa has provided critical support including facility mapping, route optimization, vaccine handling training and driver certification, temperature monitoring, data and stock management.

eHealth Africa worked closely with the government to develop a suite of KPIs with which to manage the contract, leveraging the visibility they have through the use of various tracking technologies. While eHealth Africa operates on a similar basis to a private sector LSP, through their foundation partners they were also able to receive granted up-front capital. Gaining access to low-cost capital could be prohibitive for for-profit SMEs without the confidence

of long-term revenue projections, for example through guaranteed multi-year contracts.

Reflecting on these experiences and a review of other countries' public health system outsourcing initiatives, we've observed some common challenges for outsourcing engagements with ministries of health, and how these can be overcome:

Limited management experience with outsourcing entities

In many cases, government Central Medical Stores (CMS) have limited capability to manage service contracts and use KPI data to improve supplier performance. In Senegal, this challenge was overcome with technical support from an international NGO, Intra-Health, who supported the governments wish for distribution outsourcing by issuing and managing contracts with five private sector LSPs on the government's behalf.

Loss of management control – CMS management is typically concerned about losing control of the transport function as a result of outsourcing. To alleviate this concern within health system administrations, the use of LSPs can be conducted through a slow transition to full outsourcing, for instance contracting LSPs to distribute commodities initially on individual routes or intermittently. This was the approach adopted in Uganda, where outsourcing "last mile" distribution has improved service significantly. The process started with a 15-month pilot serving 20 districts. Today there are two contracted LSPs supporting 112 districts, visiting each on a bi-monthly basis. Each provides a diverse multimodal solution, which includes use of bicycles, boats, as well as trucks.

Engagement cycles – Contract lengths from central medical stores are relatively short, often one year or even less, which is insufficient to amortise capital costs, particularly for vehicles if contracts are not renewed. These brief engagement periods are often driven by donor investment cycles, and a desire to transition operations back to government. Extending contract lengths to multiple years would reduce risks for private sector LSPs and reduce their prices to cover cost of delivery.

Payment cycles – LSPs frequently express concerns over the reliability of payment from ministries of health, which are typically underfunded. The capital-intensive nature of logistics services results in a high sensitivity towards cash flow fluctuations. If outsourcing represents the majority of transport capacity within a health system, having a larger scale helps service providers better finance capital costs from higher associated revenue and weather the storms of unpredictable funding cycles.

Despite different motivating factors, we see a need to build support for outsourcing as a potential option to help increase availability and reduce costs. For this approach to gain traction, advocacy will be needed to inform and educate government decision-makers and donors of successful transitions from in-house distributions. This could include developing opportunities for ministry of health transport and logistics staff to meet LSPs outside of contract negotiations to help all parties understand mutual requirements and expectations. Additionally, because the private sector has embraced outsourcing, bringing local examples to the attention of public health system administrators could help them understand the challenges and opportunities related to such decisions.

One promising approach for improving LSP capability is to link larger, regional LSPs with smaller local operators. An example of this has been achieved in Malawi, where Imperial Health Sciences (IHS) now operates a dedicated warehouse, while distribution is subcontracted to a commercial operator that had been an incumbent LSP to the CMS for the past decade. The commercial operator served primarily as a freight forwarder, with a small mixed fleet of vehicles and limited warehouse capacity. The company had aspirations to grow and improve its operations; the agreement enabled IHS to support the commercial operator with ongoing business improvement to achieve those growth targets. Two innovations

were thus adopted: the implementation and use of a new routing and scheduling system with GPS vehicle tracking, and the supplementation of the fleet with intermittent leasing of additional vehicles.

Like most challenges facing public health supply chains, cost is a significant perceived barrier. One particular challenge is that the true cost of in-house operations is often unknown. Capital equipment costs, for example, are often allocated to other programs and budgets. This makes it difficult to determine the competitive value of an outsourced LSP during the RFP process, and can lead to a mistaken conclusion that a private sector LSP is more expensive. Also, outsource projects often benefit from the involvement of donors in underwriting the duration and volumes of distribution contracts. This provision of volume guarantees reduces risks for LSPs as they seek to invest in vehicle fleets and warehouses, and minimizes the likelihood of delayed payment by the government.

Certain categories of work are ideal for health system outsourcing once the benefits and potential concerns are considered. These include improvements that require a skill that would be prohibitively time-consuming and/or expensive to develop in house, and those that require capital or assets not readily available to the health system. While not yet in wide use, innovative approaches to structuring outsourcing arrangements have great potential to strengthen vaccine distribution in the coming years.

Acknowledgements

Content and source research for this article is drawn from a report produced in late 2015 titled *GAVI Study – Outsourcing the Distribution Component of Vaccine and Medicine Supply Chains*. This work,

undertaken by the global health transport concern, Transaid, includes a literature review with more than 60 academic and grey sources, and contributions from more than 40 stakeholders from government Central Medical Stores, private logistics companies, NGOs and donors. In the report a number of outsourcing examples are identified within the focus countries of Uganda, Zambia, Mozambique, Senegal, Nigeria, Ghana, Kenya, Tanzania and Malawi. These examples are often funded by, or supported with Technical Assistance (TA) from, donors. Many are elements of vertical supply chains and some are core to the operation of the government-operated Central Medical Store (CMS). Two examples of outsourced vaccine logistics include current initiatives operating in Mozambique and Nigeria. The full outsourcing report can be found [here](#).

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Further reading

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