

TANZANIA: Developing a Prime Vendor Pharmaceutical Supply System

Problem: Church-owned hospitals, health centers, and pharmaceutical dispensaries in Tanzania are principally located in rural areas where 80 percent of the population resides. They have no central pharmaceutical procurement body and rely substantially upon the Medical Stores Department (MSD), international donations, and private sector pharmacies for medicines and supplies. In recent years, church hospitals have reported dissatisfaction with services provided by MSD, such as unacceptable out-of-stock rates and unreliable pharmaceutical product quality. The Mission for Essential Medical Supplies (MEMS), a not-for-profit organization established by the Evangelical Lutheran Churches in Tanzania (ELCT) had a history of providing laboratory services and supplies to health facilities. These facilities asked MEMS to expand their supply list to include pharmaceuticals and medical supplies.

Strategy for Change: The SEAM Program agreed to provide technical assistance to MEMS to develop and implement a private-sector prime vendor pharmaceutical supply system that would improve medicine quality, supply, availability, and affordability for participating not-for-profit hospitals. The system would use pooled procurement to purchase from a single supplier offer participating health facilities supplementary services from MEMS such as purchase requisition review, a strategy for drug quality assurance, rational use and medicine management training, and medicine information services. Key activities included—

- Developing stakeholder consensus regarding the prime vendor (PV) proposal
- Drafting program documents such as memoranda of understanding, PV prequalification and request for proposals, contracts, workplans, and budgets
- Performing quantification at 12 hospitals to establish annual medicine and supply requirements
- Completing Internet-based vendor prequalification with 16 private-sector suppliers
- Completing Internet-based request for proposal with six prequalified vendors
- Evaluating proposals and choosing a vendor for a multiyear contract
- Negotiating and finalizing a contract with chosen vendor (a partnership between Diocare and Crown Agents)
- Designing, implementing, and training staff on a new communications system
- Designing and implementing a quality assurance system
- Initiating MEMS' expansion plan—quantification completed at five additional hospitals

The contractual requirements were for the PV to stock and supply more than 500 items, initially to 12 rural hospitals, and expanding to 40 hospitals as the project progressed. The contracted delivery time was either 10 or 21 days, depending on the goods. The prices of the goods were fixed for 12 months; the contract started in November 2004.

Results: From November 2004 until April 2005, 14 hospital orders were received electronically from 10 health facilities. The PV made a total of 29 deliveries, with an average of two deliveries per order (range 1–6). Specific experiences included—

- The PV significantly deviated from their contracted delivery time for all orders. The average delay for receipt of first deliveries was 12 days (range 5–46 days), but delay for final deliveries averaged 49 days (range 13–88 days).
- An average of 77 percent of order items were filled (range 58–89 percent); 3 percent were partial deliveries; 20 percent of order items were not delivered. One item received (of 1,622 order-items supplied) had already expired, and 29 items (1.8 percent) had a shelf life of less than one year.
- For imported medicines, evidence of registration by the TFDA could be established for a majority of medicines (88 percent). All thirty-five medicine samples collected passed quality assurance assays (disintegration and thin-layer chromatography).

Despite considerable procurement experience, the contracted PV (Diocare/Crown Agents) had difficulty meeting terms of the contract, due mainly to underestimates of the complexity and costs of the program, substantial variations in stock demand from the health facilities, overstretched warehouse systems, and unclear contract expectations. Although the PV worked to resolve its own infrastructure and inventory deficiencies and worked with MEMS to address supply chain management issues extending from the distributor to the end user, the negatives—

out-of-stock situations, partial shipments, and poor service—outweighed the positives, and the parties agreed to discontinue the contract in late 2005.

Lessons Learned: With public sector suppliers in resource-limited countries continuing to exhibit signs of being over stressed, an efficient, cost-effective, alternate/complementary supply mechanism is a critical need; therefore, future supply system initiatives can draw from experiences and lessons learned here to design and implement a successful and sustainable pharmaceutical supply system.

- Potential prime vendor companies requesting prequalification or responding to a request for proposal to provide a PV service must perform due diligence to evaluate the feasibility of the job and the implications of meeting the contract terms, as well as have in place basic management and control systems.
- Any partnership must be based on a high level of mutual understanding, where roles and responsibilities—especially related to finances and operations—are clearly spelled out. Any partnership agreements should be in place before the proposal submission, which should clearly delineate the nature of the agreement. The main provisions of this agreement should be in writing, and the PV client should understand them.
- Trust should be quickly established and fortified over time. While providing good service in line with the contract builds trust, it also rests on following through with commitments: do not break promises.
- The higher the service level, the more the partnership will require, including—
 - High-quality, constantly updated demand data that is based on actual, up-to-date usage at each health care facility
 - Better management and control systems at PV and facilities
 - Efficient and reliable management information systems (MIS) and communications
 - Higher level of information integration from the facility to the PV; for example, full visibility of stocks, usage, availability, etc.
 - Full commitment by facilities to buy from the PV
- The RFP and contract should consider that relatively small volumes are always going to make it difficult to attract the interest of the larger suppliers and to get the best prices.
- Long-term, reliable contracts are fundamental to a PV's success. Without such contracts, PVs will have difficulty providing acceptable service.
- Before issuing the RFP, every effort should be made to harmonize the list of drugs and supplies that the facilities in the system use—ideally, through a common formulary.
- The parties should make arrangements for controlled drugs (e.g., narcotics) before signing the contract, which should involve discussions with the national regulator on how these drugs can best be supplied.
- As part of the RFP and contracting process, health care facilities need to decide if they prefer to collect their supplies from a designated point or have them delivered. The cost, organizational, and management/coordination implications of each option should be worked out and presented to the facilities as a basis for decision-making.
- Capital investments will be needed at the beginning of a prime vendor initiative to establish stocks, upgrade infrastructure, develop and implement standard operating procedures, etc.
- The role of pharmaceutical donations to mission hospitals that want to join a prime vendor system needs to be clearly understood before the hospitals are allowed to become members.
- By starting operations with a limited number of hospitals, systems can fully develop and be tested before rolling out to additional hospitals or clinics. This approach is especially important when developing an integrated supply chain.
- The organization issuing the RFP must pay close attention to any proposed partnerships and insist on seeing all related documentation and information to evaluate the nature of the partnerships and the clarity of the roles and responsibilities and financial issues. The RFP should specifically require such documentation.
- Effective hospital inventory management systems are necessary for proper forecasting and quantification.
- A strong organization to manage a prime vendor activity is pivotal to success. This organization is responsible for managing the contract with the PV and the relationships with affiliated hospitals or facilities. It receives, reviews, and revises pharmaceutical orders from the facilities, then monitors the PV's filling and delivery of those orders against the contract. The coordinating organization also provides (or arranges) technical assistance to member health care facilities to strengthen their pharmacy and supply management systems and improve rational drug use.

- The contractor of supply services needs basic analytical skills, a grasp of supply chain fundamentals, and strong management (both general and pharmaceutical) skills.
- A prime vendor initiative's sustainability requires that participating hospitals or facilities make a financial contribution (typically a percentage of their total purchases through the PV); however, participating facilities must feel that they are getting value for money.
- Developing country data sources, supply systems, health care organization infrastructure, and communication networks may not accommodate the development of a premier supply service. Consequently, either data access and systems improvements should be fully addressed prior to starting an initiative, or expectations should be more modest.

Activity Update (February 2007): Even with the failure of the original prime vendor relationship, the Mission for Essential Medical Supplies has continued with much of the original strategy developed during the SEAM Program, including quantifying requirements for pharmaceuticals and medical supplies for church hospitals, pooling procurement requirements, and using a prime vendor as their principal supplier (a local wholesaler, Pyramid Pharma, in collaboration with an international supplier, IDA). In addition, the network of hospitals has grown; as of February 2007, MEMS had enrolled a total of 22 church hospitals into the program, and two other nongovernmental organization programs are purchasing medicines and other health commodities through MEMS's supply mechanisms. In 2006, MEMS received 46 orders from 23 facilities and supplied drugs and medical supplies worth USD 360,000 (one recently enrolled hospital had not yet placed an order).

ELCT/MEMS has developed a strategic plan for July 2006 through June 2009. The current target is to enroll 36 hospitals by the end of 2008. The five-year contract with Pyramid Pharma/IDA runs through mid-2011.

As for improving communications among facilities, MEMS has connected 18 rural church hospitals via a VSAT (very small aperture terminal) satellite system and three hospitals near Arusha via a wireless system. To help support communications, MEMS, in conjunction with the Health Department of the Evangelical Lutheran Churches in Tanzania, established an information and communication technology unit in ELCT's Health Department in September 2006, which provides maintenance and trouble-shooting for IT and communications equipment installed by MEMS.

The prime vendor service level now averages 85 percent; however, hospitals expect a service level above 95 percent on each order. Several factors contribute to this deficit, some of which are beyond the capacity of the supplier (e.g., unavailability of goods in the local market or fluctuating prices that make it difficult to stick to contract prices, even for six months). Transport and related costs are also an issue. On average, approximately half (with a range from about 10 percent to near 100 percent) of the participating hospitals' pharmaceuticals/medical supplies purchases are covered by the PV relationship. While the prices of the PV products are higher than those charged by Tanzania's Medical Stores Department, they are less than the prices hospitals can find in the open market. And because of frequent product availability issues, MSD is often not a viable alternative supply source for the hospitals.

Management Sciences for Health's RPM Plus Program in Tanzania is providing technical assistance to participating hospitals to support systems strengthening—primarily focused on HIV/AIDS-related products and services.

Next steps: The PV initiative requires development or strengthening in several areas to provide the level of service that the hospitals need. Some areas relate to the supplier, while others are the responsibility of ELCT/MEMS and client hospitals—

- Additional negotiations with the prime vendor to improve level of services and decrease prices
- Further work in rationalizing the list of medicines and medical supplies available through the PV, with a goal of limiting the range of products the PV will be responsible for supplying under the terms of the contract
- Improved commodity security by developing systems for properly packaging ordered goods (sealing and strapping); helping selected local transporters introduce compartmentalized shipping, so medicines do not mix with other goods; and tracking vehicles that carry hospitals consignments, so that PV and MEMS can give the hospitals accurate information on expected date/time of shipment arrivals
- Exploration of transport alternatives to enhance security and efficiency and lower costs
- Improved access to products classified as controlled substances

- Expanded training opportunities and technical assistance as needed for client hospitals, especially related to inventory management, forecasting, and quantification
- Expanded provision of value-added services to client hospitals by MEMS