Chapter 6
Conclusions and Recommendations

6.1 Health Commodity Management and Logistics System Performance

6.1.1 Conclusions

1. The frequency of stockouts in the public sector is high, including full-supply products. These stockouts include critical drugs required for contraception, disease prevention, and treatment of sexually transmitted infections (STIs), tuberculosis (TB) and other infectious diseases.

2. Commodity availability in the public sector is inconsistent and insufficient. The data on levels of stock on hand show that inventory management practices have led to over- and understocked facilities. This can lead to stockouts and product wastage through expiration and facilities’ inability to meet client needs.

3. Product loss due to expiration is low because products are in short supply and consumed before expiration.

4. Health commodity security is additionally threatened by inadequate record keeping and information systems. Low levels of actual use of stock cards indicate that stock managers are not properly monitoring their stock levels and cannot, therefore, make informed decisions. Regular reporting of this information is critical for making logistics decisions at each level of the supply chain. Access to this data at all levels of the logistics system will increase product availability by improving the system’s efficiency.

5. The district warehouses do not maintain large quantities of health commodities in stock and primarily serve as a pass-through point from National Medical Stores (NMS) at the central level to the storerooms at health sub-districts (HSD). The survey teams found that health centers were within a reasonable distance from the HSDs to be able to pick up supplies on a regular schedule.

6. Additional staff are needed at all levels, including laboratories. According to the Health Sector Strategic Plan (HSSP), human resources for health are “both inadequate in numbers, and... inappropriately distributed” (MoH, 2000). The survey reinforced these concerns and also highlighted the lack of training and inadequate skills in commodity management among the staff.

7. Performance improvement interventions in logistics management are needed to ensure a smooth transition to a pull system. In light of the quickly changing Ministry of Health logistics system, the information and processes taught to these staff may be inconsistent or outdated, particularly for ordering and inventory management. Standardized training in logistics practices is crucial to ensure proper inventory management and, again, to ensure that the clients’ needs are met.
8. Because routine supervision is taking place, it can be used as a tool for monitoring logistics system performance in order to resolve problems quickly and for performance improvement interventions for staff.

6.1.2 Recommendations

1. Improve product availability by collecting key logistics data through the health management information system (HMIS).

This information is needed to evaluate and justify orders placed, for example, by comparing the quantities ordered to service statistics. To ensure that the logistics data needed to make forecasting, ordering, and procurement decisions is collected through the existing information system, the commodity order forms should be redesigned to include stock on hand at the facility level. Since the survey was conducted, the order forms have been reworked, in part due to the preliminary findings from this survey.

2. Analyze data collected through the HMIS and use this data for decisionmaking at the central level (e.g., for forecasting and procurement).

At present, the data are not systematically collected and analyzed at the central level. As NMS takes over forecasting and procurement functions for health commodities, they will need logistics data to forecast future needs. The MoH will also need this information for budgeting purposes.

3. Establish protocols for transferring overstocked commodities and disposing of expired products.

On the survey’s preliminary recommendation to schedule a national “dejunking” of warehouses and health centers, this has been scheduled for 2003. Protocols should be established to create a mechanism for facilities to transfer stocks between facilities to avoid stock imbalances.

4. Decentralize the transportation of health commodities.

NMS and the MoH should investigate the cost-benefit of delivering supplies directly to the HSD level, rotating through districts every two months. DELIVER carried out a cost study in December 2002 to evaluate this option. Detailed findings are available from DELIVER.

5. Establish a human resources plan to identify staff needs and funding to meet the needs.

Staff shortages have affected product availability, reporting, and overall logistics system performance.

6. Create a performance improvement plan of action for logistics management to ensure commodity security and quality of care.

This can be done mostly through on-the-job training and during supervision visits by reinforcing good commodity management practices. This should include an added emphasis on monitoring and evaluation of logistics activities and system performance. Supervisory visits should be used as a cost-effective means of reinforcing skills and for on-the-job training of staff on new guidelines, policies, and technologies. Job-aids can help supervisors to train staff. The following are specific areas where capacity building is needed to ensure a smooth transition to the pull system:

- filling out HMIS and order forms for all staff
• inventory control and stock management for all staff
• quantifying needs and placing orders for staff at the lower levels
• reviewing stock data on order forms to evaluate orders and to redistribute stock (if needed) for staff at the HSD and district levels
• consolidating orders for staff at the HSD and district levels
• financial management for staff at the HSD and district levels

6.2  Service Provision

6.2.1  Conclusions

1. The Health Sector Strategic Plan lays out a number of important goals for 2005. This survey measures progress towards those goals. For the goals that can be evaluated by this study, most of the facilities are far from reaching the target.

2. Training remains an important challenge, especially in the areas of clinical care (such as HIV) that are rapidly changing. There is a need for in-service training in all areas of HIV, STI, and TB services.

3. Availability of services is strong at the district level but weak in smaller facilities (HC II and III). New services such as voluntary counseling and testing (VCT) and prevention of mother-to-child transmission (PMTCT) exist at very few of the smaller facilities. Even for long-standing programs like tuberculosis treatment and control, most small facilities do not provide the service.

4. While this study provides a national picture of provision of care in the government and non-government health care delivery system, it does not study utilization of services. Commercial pharmacies provide medication, especially in urban areas, but were not reported on in this study. Access to medication through these pharmacies should improve the picture provided by this report. However, serious financial barriers to the purchase of medications and commodities are thought to exist in Uganda.

5. In many cases, laboratory staff indicated to the data collectors that their choice of test kit was dependent on what was available and not on any written protocols.

6. Universal precautions for infection control are not being followed in most health care facilities.

6.2.2  Recommendations

1. Serious efforts to improve quality of care and access to care for deadly and highly prevalent infectious diseases such as syphilis and tuberculosis should receive the highest priority as the country moves towards development of the health system and health care reform.

While extending PMTCT and anti-retroviral therapy to the population of Uganda are important needs, deadly and debilitating diseases like syphilis and tuberculosis are also endemic and under-treated in the country.

2. Policy guidelines for the provision of VCT and PMTCT services must be established.
This includes the selection of HIV test kits and anti-retroviral drugs and the development of protocols for their distribution and management (with consideration for electricity and refrigeration limitations).

3. Laboratory capacity to manage and conduct the tests to support these services will also need to be improved.

4. Service providers will need to be trained in the provision of these services, which involve new protocols and procedures and require new skills.

6.3 Commodity Management and Service Provision: Summary Conclusions

Following a comprehensive analysis of the information gathered during the survey, bringing together the commodity management and service provision sections of the survey, some general conclusions can be drawn about the overall ability of health facilities in Uganda to offer the HIV/AIDS support services as presented in this report.

The tables presented in Chapter 5 for each service show the percentage of facilities that meet each of the criterion applied here and then all of the criteria by type of facility. Overall, HIV/AIDS services were found to be very limited at the time of the survey. Both VCT and PMTCT are currently only available at district hospitals and HC IVs, and few facilities at those levels meet all of the criteria. These services are still being rolled out in Uganda and have not yet been widely implemented.

For OI treatment services, it is clear that facilities at the higher levels are much more likely to meet these criteria and are more capable of providing these services to clients. Ultimately, this means that a large proportion of the rural population will have to go to urban and semi-urban areas to receive treatment for OIs.

STI treatment services are more widely available than the other services at all levels, but still fall far short of the goal laid out in the HSSP of universal service coverage. Although STI commodity availability appears high, it is important to note that this is mostly due to high levels of co-trimoxazole found, while the other STI drugs were not available in the majority of facilities on the day of the survey. Furthermore, as a common antibiotic, co-trimoxazole is distributed through the essential drug kits, which were being distributed during the survey and may have contributed to the high stock levels.

All components for offering diagnostic services for TB were more widely available at the district hospitals than other facilities, although 52 percent is still insufficient for increasing TB case notification rates as specified in the HSSP. The results for TB treatment services show that health facilities have a long way to go to reach the Government of Uganda’s goals. The additional funds that are anticipated from the GFATM should help with this effort.

Overall, facilities at the district and health sub-district (HC IV) levels were much more likely than other facilities to be able to offer these services based on the criteria laid out in Chapter 5. Including the lower level facilities pulls down the overall results. This means that people in rural areas have to travel to an urban or semi-urban area to access most of these services.

Only a small proportion of staff had received training in each of the areas studied: commodity management, service provision, and laboratory diagnostics. Although the results presented in Chapter 5 look at the availability of at least one staff member who had been trained in each area, the rates are very low for many service areas. Facilities cannot manage these commodities, offer these services, or perform these laboratory tests if they do not have staff who have been trained to do so.
Supervision is taking place in all the areas studied and can be used as an opportunity for on-the-job training and performance monitoring.

Infection control was identified as a serious problem, with few facilities having the necessary provisions or taking proper actions to promote infection control and to properly dispose of infectious health care waste.

Reported laboratory capacity was high at hospitals and HC IVs, although there was limited availability of HIV test kits and other laboratory equipment needed to actually offer these services. Laboratory services require a combination of trained staff, commodities, and equipment at all levels, and the correct combination was not often found.

Reported service availability was high at the district and HSD levels, although availability of certain commodities was somewhat low at these levels. Conversely, reported service availability for STIs and OIs was lower at the lower-level facilities, but availability of certain commodities was higher at these levels. For example, there was higher reported VCT service availability at hospitals and HC IVs than other facilities, but few HIV test kits were available. More facilities reported offering STI and OI treatment services at higher levels than at lower levels. However, for many STI drugs, stockout rates over the six-month period were higher for higher-level facilities than for lower-level facilities. Furthermore, availability of certain STI and OI drugs on the day of the survey, such as ciprofloxacin, benzathine penicillin, and co-trimoxazole, was slightly higher at the lower levels, where fewer facilities reported the capacity to offer the service. This is positive in terms of reaching the broadest base of clients with the drugs that they need, but providers must also be trained at the lower levels to offer the services.

This is not the case for TB blister packs, however; many more facilities reported both service availability and stock availability of blister packs at the higher levels. Family planning and malaria treatment services were not studied and are therefore not included in this analysis.

In sum, there is a disconnect between service and commodity/equipment availability. Anecdotally, the data collectors heard frustration from many service providers who had been trained but had no products to offer the service and felt they were losing their skills. Likewise, the data collectors heard from other staff who had not yet been trained to offer the services but wanted to, because they had clients requiring or requesting these services. All of the components discussed here—trained staff, availability of health commodities, and laboratory equipment—must be present at a minimum for quality health services to be offered to the population of Uganda.