

Tanzania

Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

Findings and
Recommendations of the
PMTCT and ART Assessment
Team

Claudia Allers
Marilyn Noguera
Barry Chovitz
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Tanvi Pandit
Sultan Mlandula
Paul Senge
Gerald Massuki
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September 2003



The United Republic of Tanzania
Ministry of Health



DELIVER
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Abstract

In September 2003, JSI/DELIVER conducted an assessment of the logistics system capacity and individual site readiness to provide PMTCT services and to initiate ART at selected public sector health facilities in Tanzania. The purpose of the assessment was to support government expansion of PMTCT from five pilot sites to 28 health facilities in five regions by addressing the logistics system constraints to ensuring a reliable and uninterrupted supply of the broad range of commodities required for PMTCT and ART, and by conducting an evaluation of the overall readiness of each site to provide these services. Several private providers, nongovernmental and faith-based organizations, and employer-based programs were included in the assessment to learn about PMTCT and ART in these sectors and to identify opportunities for public/private sector collaboration in expanding service delivery and ensuring effective commodity distribution. In addition, interviews with pharmaceutical company representatives and visits to retail pharmacies provided an overview of current commercial sector distribution of ARV drugs in Tanzania.

The main findings showed an urgent need to build logistics management capacity within the central level MOH to—

- Coordinate multiple sources of rapidly increasing funding for commodity procurement.
- Strengthen commodity-forecasting capacity.
- Align procurement cycles and supplier lead times with the in-country supply pipeline and demand for services.

At the facility level, assessment findings showed that individual site readiness is heavily constrained by the availability and quality of human resources; laboratory infrastructure and capacity; and lack of an established inventory control system and standardized pharmacy management procedures.



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John Snow, Inc.
1616 North Fort Myer Drive, 11th Floor
Arlington, VA 22209 USA
Phone: 703-528-7474
Fax: 703-528-7480
Email: deliver_project@jsi.com
Internet: deliver.jsi.com

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Acronyms

AAI	Accelerated Access Initiative
ACT	Anglican Church of Tanzania
AIDS	acquired immune deficiency syndrome
AMREF	African Medical and Research Foundation
ANC	antenatal care
ART	antiretroviral therapy
ARVs	antiretroviral drugs
AZT	azidothymidine (also ZDV)
BCC	behavior change communications
BI	Boehringer Ingelheim
BMS	Bristol, Myers, Squibb
CARF	Community AIDS Response Fund
CDC	U.S. Centers for Disease Control and Prevention
CHMT	Council Health Management Team
CMO	chief medical officer
CSL	Commodities Security and Logistics
CSSC	Christian Social Services Commission
DACC	District AIDS Control Coordinator
DDA	Dangerous Drug Act
DDH	District-Designated Hospital
DFID	Department for International Development
DHMT	District Health Management Team
DOTS	directly observed treatment short-course
ED	essential drugs
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
ELISA	enzyme-linked immunosorbent assay
EPI	Expanded Program on Immunization
FOB	free on board
FBO	faith-based organization
FDC	fixed-dose combination drug
FEFO	first-to-expire, first-out
FP	family planning
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GH	Bureau for Global Health
GSK	GlaxoSmithKline
GTZ	German Technical Cooperation Agency
HBC	home-based care
HIV	human immunodeficiency virus
HMIS	health management information system
HSSP	Health Sector Strategic Plan
IEC	information, education, and communication
INH	isoniazid
JICA	Japan International Cooperating Agency
JSI	John Snow, Inc.

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LGAs	Local Government Authorities
LMIS	logistics management information system
LST	Logistics Support Team
MCH	maternal and child health
MDM France	<i>Médecins du Monde</i> , France
MDM Spain	<i>Médicos del Mundo</i> , Spain
MOH	Ministry of Health
MSD	Medical Stores Department
MSD	Merck, Sharp and Dome
MTB	Medical Tender Board
MTCT	mother-to-child transmission
MTEF	Medium-Term Expenditure Framework
MUCHS	Muhimbili University College of Health Sciences
NACP	National AIDS Control Programme
NEDL	National Essential Drug List
NGO	nongovernmental organization
NMSF	National Multisectoral Strategic Framework on AIDS
NTLP	National Tuberculosis and Leprosy Program
NVP	nevirapine
OI	opportunistic infection
PASADA	Pastoral Activities and Services for People with AIDS
PATH	Program for Appropriate Technology in Health
PCR	polymerase chain reaction
PEP	post-exposure prophylaxis
PLWHA	people living with HIV/AIDS
PMTCT	prevention of mother-to-child transmission
PORALG	President's Office-Regional Administration and Local Governments
PRINMAT	Private Nurses and Midwives Association of Tanzania
PRSP	Poverty Reduction Strategy Paper
PSU	pharmaceuticals and supplies unit
QA	quality assurance
RACC	Regional AIDS Control Coordinator
RCHS	Reproductive and Child Health Services
RHMT	Regional Health Management Team
RPR	rapid plasma reagin
RTD	rapid test device
SDC	Swiss Development Corporation
STG	standard treatment guidelines
STI	sexually transmitted infection
TACAIDS	Tanzania AIDS Commission
TADEPA	Tanzania Development and AIDS Prevention Trust
TB	tuberculosis
TBA	traditional birth attendant
TBL	Tanzania Breweries Limited
TB/L	tuberculosis/leprosy
TFDA	Tanzanian Food and Drug Authority
TFNC	Tanzania Food and Nutrition Centre
TMAP	Tanzania Multisectoral AIDS Project (World Bank)

TPC	Tanzania Planting Company
TPHA	Treponema Pallidum Hemagglutination Assay
TPPA	Treponema Pallidum Passive Agglutination
TRC	Tanzania Railways Corporation
UNICEF	United Nations Childrens' Fund
USAID	United States Agency for International Development
VCT	voluntary counseling and testing
VDRL	Venereal Disease Research Laboratory
VL	viral load
WB	World Bank
WHO	World Health Organization
WMATA	Walio Katika Mapambano na AIDS Tanzania (Tanzanian organization working with PLWHAs)
ZDV	zidovudine (also AZT)

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We would like to express our great respect, admiration, and gratitude to all the hardworking and dedicated people we interviewed whose lives are committed to sensitizing and mobilizing people, communities, and the government to make a difference in the lives of people living with human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) and to protect the health of the nation. And, not least of all, to the health care workers everywhere in Tanzania who are at the forefront of the daily battle to combat the disease, infirmity, and hopelessness caused by HIV and AIDS.

We hope that the results of this assessment will assist the MOH and its partners in strengthening the logistics management capacity of the health care delivery system to be able to respond to the urgent demand for a reliable and consistent supply of high-quality products needed to support provision of comprehensive HIV/AIDS prevention, care, and treatment services for those in need, and to improve the quality of all health services nationwide.

Marilyn Noguera, JSI/DELIVER Country Team Leader for Tanzania, Assessment Team Leader

Barry Chovitz, JSI/DELIVER, Resident Logistics Advisor based in Dar es Salaam

Claudia Allers, JSI/DELIVER, Public Health Logistics Advisor

Abdourahmane Diallo, JSI/DELIVER, Public Health Logistics Advisor

Christopher Shaw, JSI/IQA MTCT-Plus Project, Clinical Advisor

Tanvi Pandit, Contraceptive Security Advisor, USAID/Washington, Commodity Security and Logistics Division

Executive Summary

Purpose and Objectives

The success of the Ministry of Health's (MOH) plans for immediate expansion of prevention of mother-to-child transmission (PMTCT) services and eventual initiation of antiretroviral therapy (ART) will depend on (1) the capacity of the public sector logistics system to provide a reliable and uninterrupted supply of the commodities required and (2) the service capacity of the individual sites to provide these services. Therefore, the purpose of this assessment was twofold: first, to assist the MOH in identifying strengths and limitations of the current logistics systems for managing the broad range of commodities required to support PMTCT and ART, and second, to determine individual site readiness to initiate PMTCT and ART in terms of personnel, services, and infrastructure.

The PMTCT and ART commodities studied during the assessment include—

- antiretroviral drugs for PMTCT and HIV treatment programs (PMTCT Plus and ART)
- HIV tests and other laboratory testing reagents and supplies
- protective gear and supplies for infection prevention and health worker safety
- drugs for the treatment of tuberculosis (TB), sexually transmitted infections (STIs), and opportunistic infections (OIs)
- contraceptives and condoms.

This assessment builds on earlier PMTCT assessments conducted by the MOH and its partners, including the U.S. Centers for Disease Control and Prevention (CDC), and ongoing MOH and JSI/DELIVER collaboration in the design and implementation of an integrated logistics system for management of public sector health commodities. Data, findings, and recommendations from the recently completed baseline survey on commodity availability of HIV test kits, rapid plasma reagin (RPR) syphilis tests, STI drugs, contraceptives, and condoms at government health facilities are incorporated into the findings and conclusions of this report (United Republic of Tanzania MOH October 2003).

The key factors affecting the logistics system and availability of PMTCT and ART products at health facilities are highlighted in this report, along with specific recommendations for strengthening logistics management capacity. This assessment will also help to lay the foundation for ensuring the long-term availability of these products (i.e., commodity security) by highlighting the policy, financing, and management issues that affect commodity procurement, distribution, and use. Individual site reports have been prepared to assist decision makers in targeting efforts and resources to build capacity at the selected sites to facilitate expansion of PMTCT nationwide and eventual initiation of ART. The assessment objectives and activities are summarized in the following section:

Objectives

- Identify strengths and limitations of the current MOH logistics system for forecasting, procurement, storage, and distribution of antiretroviral drugs (ARVs) for both PMTCT and ART; drugs for treatment of TB, OIs, and STIs; HIV tests and related laboratory reagents and supplies; and supplies for infection control and health worker safety.

- Provide recommendations for strengthening logistics system capacity to manage these products.
- Identify the current stage of readiness of selected public and private sector facilities to initiate PMTCT and ART in terms of personnel, services, and infrastructure.
- Identify MOH policies and procedures needed to support PMTCT and ART service delivery and enhance logistics management of the commodities required to implement these services.
- Identify the critical issues in the systems, policies, and financing that may facilitate or hinder commodity security (long-term product availability).

Activities

The team conducted an assessment of the overall MOH logistics system capacity to manage antiretroviral drugs, diagnostic tests, and other products required to support voluntary counseling and testing (VCT), PMTCT, and ART services. Facility assessments were conducted at 33 public sector facilities, including the five pilot sites, 24 of the 28 health facilities selected for PMTCT expansion, and a few additional facilities, to assess their current stage of readiness to provide PMTCT and ART. Logistics system capacity and site readiness to provide PMTCT and ART was also assessed at seven private sector facilities, including private hospitals, employer-based programs, and voluntary service organizations (nongovernmental organizations [NGOs] and faith-based organization [FBOs]).

Approximately 192 people were interviewed representing a wide range of stakeholders involved in HIV/AIDS care and treatment in the country. The people interviewed included HIV/AIDS program managers, researchers, clinicians, pharmacists and laboratory staff, pharmaceutical experts, procurement specialists and warehouse managers, NGO and FBO service providers, directors and health officers of donor organizations and Tanzanian companies, and people living with HIV/AIDS (PLWHAs).

This report documents the assessment team's findings and recommendations to support the expansion of PMTCT services and eventual initiation of ART services in the public sector, including opportunities for public/private sector collaboration to enhance the government's efforts to expand PMTCT and ART in Tanzania.

Findings

PMTCT in Tanzania is not planned as a new vertical program. Rather, it is envisioned that comprehensive and continuous HIV prevention, care, and treatment will be offered to HIV-positive mothers and infants through the integration of PMTCT services into existing antenatal care services, which will then be extended to PMTCT Plus to include ART. This will require increased attention to coordination and strengthening of the existing public sector logistics system to be able to ensure a consistent and reliable supply of the commodities needed to support a wider range of services. The assessment findings are summarized below and are discussed in more detail in the Findings section of this report.

Strengths

- National PMTCT Guidelines have been drafted that clearly describe the services and commodities that will be required to expand existing antenatal care (ANC) services to include voluntary counseling and testing (VCT), PMTCT, and ART.
- All HIV/AIDS-related commodities, except ARV drugs for ART, are already being distributed and used through existing vertical programs and services in the public sector.

- The MOH already has a strategy in place for integrating logistics management of all essential health commodities in the public sector health care delivery system, which already includes many PMTCT-related products (United Republic of Tanzania MOH and JSI/DELIVER 2002).
- Elements of the logistics system for managing Dangerous Drug Act (DDA) products and TB drugs could be applied to management of ARV drugs to enhance security in storage and distribution and monitoring of drug use and stock balances at service delivery sites.

Limitations

- The current donor- and research-supported logistics systems at PMTCT pilot sites cannot be replicated for expansion of PMTCT services.
- The MOH logistics systems that support the sites selected for expansion of PMTCT are currently unable to ensure a reliable and uninterrupted supply of drugs, laboratory reagents, and consumable supplies required to provide the service.
- Constraints on ensuring a reliable and uninterrupted supply of the commodities needed are systemic in nature and will require system-wide interventions to strengthen logistics management of all essential health commodities within the MOH.
- The MOH is unable to monitor stock balances and commodity use at the facility and national levels due to the lack of a logistics management information system (LMIS).
- Written procedures for ordering, storing, and dispensing drugs, laboratory reagents, and consumable supplies are not available throughout the health care delivery system, and current practices are not standardized.
- While PMTCT-related commodities are currently supplied through several vertical programs within the MOH, i.e., Reproductive and Child Health Services (RCHS), Diagnostic Services Unit, National AIDS Control Programme (NACP) (STI and VCT programs), and pharmaceuticals and supplies unit (PSU), minimal communication and coordination exists between vertical programs at the central level for forecasting, procurement, and management of PMTCT commodities.
- At the facility level, supply and management of PMTCT products is not coordinated among pharmacy, laboratory, and nursing staff involved in provision of PMTCT services, and staff are not trained in logistics management of essential health commodities.
- Many laboratory facilities are unable to provide basic tests for antenatal care such as hemoglobin and RPR syphilis screening due to inadequate supplies and storage capacity, including cold chain for HIV tests and other laboratory reagents.
- Resources at the national and facility levels are currently insufficient to purchase and maintain a full supply of drugs, laboratory reagents, and supplies needed to support PMTCT and ART services. Health facilities experience problems in accessing centrally allocated funds and local cost-sharing funds to purchase needed commodities.
- The MOH currently lacks logistics management capacity to coordinate multiple sources of funding and multiple suppliers of PMTCT commodities; to manage commodity procurements and donations across vertical programs; to forecast commodity requirements; and to monitor the in-country supply pipeline.

- Private providers, NGOs, FBOs, and employer-based program sites that already provide PMTCT and ART services are at a higher stage of readiness than MOH sites, but they are constrained by unreliable sources of supply and inefficient logistics systems for ensuring full supply of needed commodities.
- While logistics system strengthening will improve overall supply and availability of PMTCT products at health facilities, some of the public sector health facilities selected for expansion of PMTCT will require significantly more resources than others to initiate PMTCT services.

Recommendations

The success of any health program depends on its capacity to ensure a reliable and uninterrupted supply of the commodities needed to support service provision and to meet the needs of the people the program is intended to serve. As the Government of Tanzania works to integrate comprehensive HIV/AIDS prevention, care, and treatment services into all health programs, it will be critical to support implementation of the integrated logistics system for essential health commodities to ensure availability of HIV/AIDS commodities at all levels of the public sector health care delivery system. The following recommendations are discussed in more detail in the Conclusions and Recommendations section of this report.

Immediate-Term Actions

Immediate-term actions that can be taken to facilitate expansion of PMTCT services in the public sector and to ensure a reliable and uninterrupted supply of ARV drugs for initiation of PMTCT Plus and ART include—

1. Recognizing that some health facilities are at a higher stage of readiness than others to initiate PMTCT and ART in terms of personnel, services, and infrastructure, it is recommended that the program—
2. initiate PMTCT and ART services first at those facilities that are at a higher stage of readiness, and
3. focus efforts and allocate resources to build capacity at those facilities that require more attention for startup, concentrating on the areas of need identified in the individual site reports.
4. Include clinical, counseling, nursing, pharmacy, and laboratory staff in PMTCT and ART training activities.
5. Private providers, NGOs, FBOs, and employer-based programs that are already providing PMTCT and ART, or are ready to initiate services but are constrained by unreliable sources of supply, should be considered for public sector support in procurement and distribution of PMTCT and ART commodities.
6. Integrate ordering and reporting of PMTCT commodity distribution and use within the *mini-indent* system currently being rolled out in 11 regions to manage STI program commodities. Many PMTCT-related commodities are already being managed through the STI Program (HIV test kits, STI drugs, RPR syphilis reagents) and nevirapine tablets and syrup could easily be added at this point. Collaboration between NACP and the PMTCT Secretariat to standardize the data collection, reporting, and ordering systems for these products could result in a single, integrated logistics system for managing STI and PMTCT commodities in the short term. The mini-indent system would then ultimately be incorporated into the larger, integrated logistics system for public sector health commodities.
7. Develop and implement a pilot data collection, ordering, and inventory control system for the introduction of ARV drugs at selected sites.
8. Consider a vertical supply pipeline for ARV drugs with direct delivery from the central level to the health facilities that will provide PMTCT Plus and ART in the initial phase of scaleup. As services expand, and

the number of patients and volume of commodities increases over time, options for integrating management of the ARV drug supply with other HIV/AIDS products should be assessed.

9. Given the nature of ARV drugs, measures to ensure security in storage and transport and procedures for monitoring ARV drug use at facilities will need to be established. In the immediate term, ARV drugs should be stored in a secure cage or reinforced storage room at MSD and kept in locked cabinets inside locked pharmacy storerooms at dispensing facilities. Procedures and safeguards for restricting access to the products/product storage areas should be established and disseminated.

Intermediate and Long-Term Actions

It is equally important to continue the ongoing work to establish the MOH integrated logistics system for essential health commodities to be able to manage the broad range of HIV/AIDS-related commodities required to support HIV prevention, care, and treatment services. (Tanzania MOH and JSI/DELIVER 2002)

System-wide interventions to strengthen public sector logistics system capacity will be required to ensure availability of the commodities needed to support expansion of PMTCT services and initiation of ART. Specific interventions are to—

- Implement the LMIS and standardized inventory control system currently under development by the MOH and JSI/DELIVER for integrated management of HIV/AIDS commodities.
- Build logistics management capacity to forecast and quantify HIV/AIDS commodity requirements and manage the in-country supply pipeline.
- Strengthen coordination of financial resources for procurement of PMTCT and ART commodities at national and facility levels.
- Incorporate logistics management of health commodities into PMTCT and ART training activities.

Special attention will be required to improve logistics management of laboratory testing reagents and supplies to support PMTCT and ART. Specific requirements for selection, procurement, management, and use of HIV tests will need to be considered (e.g., short shelf life, cold storage requirements, testing protocols, and training required).

It is critical, therefore, to establish a logistics management coordinating mechanism or body within the MOH with sufficient authority and logistics management capacity to communicate with multiple donors and other government entities to coordinate the supply and management of PMTCT and ART commodities across multiple vertical programs.

For longer-term sustainability, logistics management of PMTCT and ART commodities must be coordinated and integrated with the supply and management of all essential health commodities in ways that are feasible, efficient, and effective. This includes coordination of sources of funding and sources of supply for commodity procurement at the national level; implementation of a standardized LMIS and inventory control system for all products; and building logistics management capacity to forecast commodity requirements and manage the in-country supply pipeline.

Background

I. HIV/AIDS Prevalence and Impact

Current estimates indicate an human immunodeficiency virus (HIV) prevalence of 10 percent in the general population of 33.5 million in the Tanzania mainland. The most common routes of transmission are heterosexual, mother-to-child transmission (MTCT), and blood transfusions. The most vulnerable populations are commercial sex workers, young women, and mobile populations, including military recruits. A rising trend in HIV prevalence among youth (60 percent of new infections are in the 15- to 24-year-old age group [HSSP 2003]) indicates that this population is at even higher risk for HIV infection. Increasing rates of HIV infection in the general population and infants indicates that this trend has not peaked. Data extrapolation of HIV prevalence in the male and female population, (10.4 percent and 13.7 percent, respectively), indicates that 2.2 million people over age 15 are living with HIV on the Tanzania mainland, 84 percent of whom are in the 15- to 49-year-old age group (United Republic of Tanzania MOH February 2003b).

While data on HIV prevalence among pregnant women attending antenatal care clinics range from 4.2 percent to 32.1 percent, the recent draft prevention of mother-to-child transmission (PMTCT) guidelines (PMTCT Guidelines) uses an estimated HIV prevalence of 12 percent and a vertical transmission rate of 40 percent in estimating that 72,000 HIV-positive infants will be born to 180,000 HIV-positive mothers per year. Of these, 25,000 HIV-positive infants (34.7 percent) will contract the HIV virus through breastfeeding. This constitutes an enormous impact on the health of women of reproductive age and a significant increase in child mortality due to HIV/AIDSs, virtually reversing all gains made in child survival in the past 20 years (United Republic of Tanzania MOH September 2003).

Access to PMTCT services for this target population of 180,000 HIV-positive mothers and 72,000 HIV-positive infants per year will be limited by service capacity at PMTCT sites (including infrastructure, human resource capacity, and laboratory services) as well as logistics system capacity to ensure a reliable supply and continuous availability of PMTCT commodities. Uptake of services will also depend on the number of pregnant women who attend antenatal care (ANC) clinics, receive counseling and accept HIV testing, agree to receive treatment for themselves and their infants, and receive antiretroviral therapy (ART) intervention at delivery whether at a health facility or at home, and the number of infants that receive timely ART intervention.

The greatest impact of HIV/AIDS is felt in the health sector, where increased adult and child morbidity and mortality due to HIV/AIDS-related illness accounts for over 50 percent of hospital bed occupancies. This is placing an additional burden on the already strained health care delivery system, where demand far outstrips service capacity, and irregular supply and availability of drugs, laboratory reagents, and medical supplies is a major constraint to effectiveness and quality of services. This is further exacerbated by the increasing number of health care workers affected by HIV/AIDS themselves, a rapidly growing population of orphans under 15 years old, and a 10-year reduction in life expectancy at birth (projected 56-year life expectancy in Tanzania now estimated at 47 years according to World Bank estimates) (World Bank 2001). The effect of HIV/AIDS on the most productive age group of the workforce (20 to 49 years old), and the social stigma and discrimination regarding HIV/AIDS, is also taking its toll on the education, social, and economic sectors of society. Stigma and discrimination are recognized as a major challenge in the efforts to sensitize and mobilize people, families, communities, and the government in the battle against the epidemic.

II. Government Response to HIV/AIDS

Much progress has been achieved in developing and harmonizing government policies and strategies to address the HIV/AIDS epidemic across all sectors of society in Tanzania. Reorganization and re-assignment of roles and functions within the structure of the Ministry of Health (MOH) are being undertaken to mobilize a more effective response within the health sector. Multiple international organizations, government entities, and voluntary, private, and commercial sector partners are becoming engaged in a more coordinated national response to HIV/AIDS. Technical policies and guidelines have been drafted for implementation of voluntary counseling and testing, prevention of mother-to-child transmission of HIV, and antiretroviral therapy. The current status of voluntary counseling and testing (VCT), PMTCT, and ART services in Tanzania is described in the Findings and Recommendations section of this report.

National Multisectoral Response and Strategic Framework

Originally a health sector response, the Government of Tanzania has now built a national response based on a multisectoral strategy expanded to include civil society and the education, social, economic, and private sectors, among others. The Government of Tanzania's multisectoral national response to HIV/AIDS is coordinated under the guidance of the Tanzania AIDS Commission (TACAIDS), established by an act of Parliament in 2001. The recently developed National Multisectoral Strategic Framework on HIV/AIDS for 2003–2007 (United Republic of Tanzania MOH April 2003a), operationalizes the National HIV/AIDS Policy developed in November 2001 and provides strategic guidance for planning and implementation of programs, projects, and interventions by stakeholders; a monitoring and evaluation system for measuring progress toward goals; and a framework for institutional and financial coordination of the national response across all sectors (United Republic of Tanzania MOH 2003a).

Resource Mobilization and Financial Management

TACAIDS will oversee the management and allocation of multiple sources of funding for HIV/AIDS activities through a National HIV/AIDS Fund to which development partners (donors), private sector entities (companies, foundations), and the government may contribute through a basket funding mechanism. Different funding accounts will be created to facilitate mobilization, disbursement, and accountability of resources to support HIV/AIDS activities at the national, local government, and community levels, including a national-level Public Sector Fund, local government authority requests to be managed by Local Councils, and a Civil Society Fund for providing resources to communities and civil society organizations to support community-based HIV/AIDS interventions. The Global Trust Fund, a separate fund for managing allocations for HIV/AIDS received from the Global Fund to Fight AIDS, tuberculosis (TB) and Malaria (GFATM), will be established in accordance with GFATM requirements. While procurement of services and commodities is regulated by the Public Finance and Procurement Act of 2001, the Ministry of Finance and TACAIDS have yet to establish the mechanisms and quality assurance (QA) procedures for ensuring rapid and effective procurement and inventory management of HIV/AIDS commodities funded through the National HIV/AIDS Fund. (Ibid).

III. Prevention of Mother-to-Child Transmission of HIV

PMTCT services were introduced in Tanzania under a UNICEF-supported pilot project between April 2000 and December 2002 at four referral hospitals and one regional hospital. Additional technical and financial support was provided by the German Technical Cooperation Agency (GTZ) at the Mbeya Referral Hospital and by *Médecins du Monde* (MDM) at the Kagera Regional Hospital. An evaluation of the five pilot sites was undertaken by the MOH and consultants from the U.S. Centers for Disease Prevention and Control (CDC) in December 2002. Based on their findings, the decision was made that expansion of PMTCT to all 21 regions

of the country was feasible despite significant challenges and degrees of success noted at the different pilot sites (CDC 2002). Logistics problems cited included breaches in the national HIV testing algorithm and test kit shortages for VCT, oversupplies of azidothymidine (AZT) with a short shelf life, and ineffective guidance on disposal of expired product. The evaluation report identified the need for a routine reporting and ordering system for resupply of test kits and supplies and recommended a centrally managed ARV drug supply system (Ibid).

In addition, since December 2002, *Médicos del Mundo/Spain* (MDM/Spain)—in collaboration with Save the Children—has been supporting training and commodity procurement and distribution for VCT, sexually transmitted infection (STI) diagnosis and treatment, and PMTCT services in three districts of the Coast Region and one district in the Arusha Region. Plans are to expand VCT, STI, and PMTCT services to three more districts by the end of 2003.

The MOH conducted a PMTCT Situational Analysis at 28 selected public sector health facilities in five regions in April 2003 to assess capacity and resource needs to initiate expansion of PMTCT. Study findings identified the need to build human resource capacity; provide modifications in health facility infrastructure, including replacement and purchase of new equipment; improve the supply and availability of drugs, laboratory reagents, and supplies; and establish PMTCT coordinating bodies at the regional, district, and health facility levels to support integration of PMTCT services into the existing essential health services delivery system.

Recognizing that the logistics system for supply and management of HIV/AIDS commodities and pharmacy management procedures at health facilities had not been addressed adequately in earlier assessment activities, in August 2003, the United States Agency for International Development (USAID)-funded John Snow, Inc. (JSI)/DELIVER project was asked to collaborate with the MOH to assess logistics system capacity and site readiness to expand PMTCT and initiate ART at the 28 public sector health facilities selected for expansion of PMTCT services. The scope of work was expanded to include an assessment of current PMTCT and ART services and logistics system capacity in the private and voluntary sectors, and commercial sector distribution of ARV drugs in Tanzania.

IV. Support for PMTCT and ART Activities in Tanzania

Myriad international organizations, government entities, private, nongovernmental organization (NGO), and voluntary sector partners are providing financial and technical support for HIV/AIDS activities in Tanzania. Support for PMTCT currently includes funding and technical support in research, program management, service provision, and commodity procurement. Large infusions of new resources to support the government's plan to expand PMTCT services to all 21 regions of the country are expected to become available through the Global Fund Round Three Proposal, the U.S. President's Initiative and Emergency Fund, and the proposed HIV/AIDS Care and Treatment Plan being developed by the MOH and the Clinton Foundation. This will include funding for procurement of a broad range of HIV/AIDS-related commodities to support VCT, PMTCT, and ART. A major challenge for the MOH will be to coordinate and manage the multiple sources of funding, technical assistance, and commodities that will be provided through these partners.

The Global Fund Round Three proposal for Tanzania was recently approved for funding by the GFATM. U.S.\$88 million will be available to support improved access to VCT and PMTCT, introduction of ART with an emphasis on screening of TB patients for HIV, and integration of TB and HIV/AIDS services in 45 targeted districts. PMTCT services will be integrated into existing services at 15 health facilities, and the number of VCT sites will triple, from 71 to 310, in these districts. The program will be coordinated and implemented through 19 public, NGO, faith-based organization (FBO), and private sector partner institutions,

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representing a model for public/private sector partnership. A major challenge for the government of Tanzania is how the GFATM-funded program will be coordinated with other internationally funded PMTCT, PMTCT Plus, and ART activities such as the U.S. President's Initiative and Emergency Plan, Clinton Foundation proposal, World Bank (WB) Tanzania Multisectoral AIDS Project (TMAP), and World Health Organization (WHO) "3 by 5" strategy.

Assessment Framework and Methodology

I. Purpose and Objectives

The success of the MOHs plans for immediate expansion of PMTCT services and eventual initiation of ART will depend on (1) the capacity of the public sector logistics system to provide a reliable and uninterrupted supply of the commodities required, and (2) the service capacity of the individual sites to provide these services. Therefore, the purpose of this assessment was twofold: first, to assist the MOH in identifying strengths and limitations of the current logistics systems for managing the broad range of commodities required to support PMTCT and ART, and second, to determine individual site readiness to initiate PMTCT and ART in terms of personnel, services, and infrastructure.

The PMTCT and ART commodities studied during the assessment include—

- antiretroviral drugs for PMTCT and HIV treatment programs (PMTCT Plus and ART)
- HIV tests and other laboratory testing reagents and supplies
- protective gear and supplies for infection prevention and health worker safety
- drugs for the treatment of TB, STIs, and OIs
- contraceptives and condoms.

The scope of the assessment was broadened to include visits to private sector facilities already providing PMTCT and ART services, including private providers and hospitals, employer-based programs, and voluntary sector organizations. The purpose was to identify lessons learned, areas of comparative advantage, and opportunities for public/private sector collaboration to enhance the Government of Tanzania's national response to HIV/AIDS.

Therefore, in addition to an assessment of logistics system capacity and pharmacy management at the site, the experience and stage of readiness of each of the public and private sector facilities visited was assessed in terms of leadership and program model, clinical care and laboratory services, staffing, management, evaluation, and community involvement in implementation of HIV/AIDS care and treatment services.

In addition, stakeholder interviews with representatives of pharmaceutical companies and visits to retail pharmacies were conducted to assess current commercial sector distribution of ARV drugs in Tanzania.

The assessment findings and recommendations are intended to be used by the MOH and its partners in furthering expansion of national PMTCT services and in developing and implementing ART services.

The assessment objectives are summarized below:

- Identify strengths and limitations of the current MOH logistics system for forecasting, procurement, storage, and distribution of ARV drugs for both PMTCT and ART; drugs for treatment of TB, OIs, and STIs; HIV tests and other related laboratory reagents and supplies; and supplies for infection control and health worker safety.
- Provide recommendations for strengthening logistics system capacity to manage these products.

- Identify the current stage of readiness of selected public and private sector facilities to initiate PMTCT and ART in terms of personnel, services, and infrastructure.
- Identify MOH policies and procedures needed to support PMTCT and ART service delivery, and enhance logistics management of the commodities required to implement these services.
- Identify the critical issues in systems, policies, and financing that may facilitate or hinder commodity security (long-term product availability).

II. Assessment Framework

The assessment focused on the key functions of a logistics system required to ensure a reliable and uninterrupted supply of essential health commodities and the current logistics system capacity to manage commodities for PMTCT and ART. The specific elements assessed include—

- product selection and quality assurance
- serving customers
- funding for PMTCT and ART commodities
- logistics management information system
- forecasting
- procurement
- inventory management, storage, and distribution
- human resources
- organizational capacity for logistics management.

At the facility level, the assessment focused on the current stage of readiness of the public and private sector sites visited to initiate or expand PMTCT and ART services. The following areas of program management, service provision, and laboratory and pharmacy capacity were assessed:

- leadership and program model
- services and clinical care
- management and evaluation
- staffing and experience
- laboratory testing capability and quality standards
- drug management and procurement.

The organization and operations of a service delivery program have an impact on the design and functioning of a logistics system. The logistics system must respond to and support the policies, regulations, protocols, and guidelines that govern delivery of services. Figure 1 depicts the broad spectrum of commodities needed to support a comprehensive HIV/AIDS program. More than 120 different health commodities are required to provide the full range of HIV prevention, diagnostic, care, and treatment services. As figure 1 shows, ART is part of a continuum of care in a comprehensive approach to HIV/AIDS that includes prevention, diagnosis, and treatment of opportunistic infections (OIs), palliative care, antiretroviral therapy for AIDS, and psychosocial support services. Management of ART services should be linked with other existing HIV/AIDS prevention and care activities and service delivery systems.

Laboratory services for screening and monitoring must also be available at different levels of care, and there must be a multidisciplinary pool of human resources for effective delivery of services. Successful procurement, distribution, and use of HIV/AIDS commodities depends on the support of an established laboratory infrastructure and capacity; a well-functioning supply chain to ensure uninterrupted delivery of product; and provider, client, and community education and involvement in implementing these services.

Figure 1.
Commodities for a Comprehensive HIV/AIDS Program

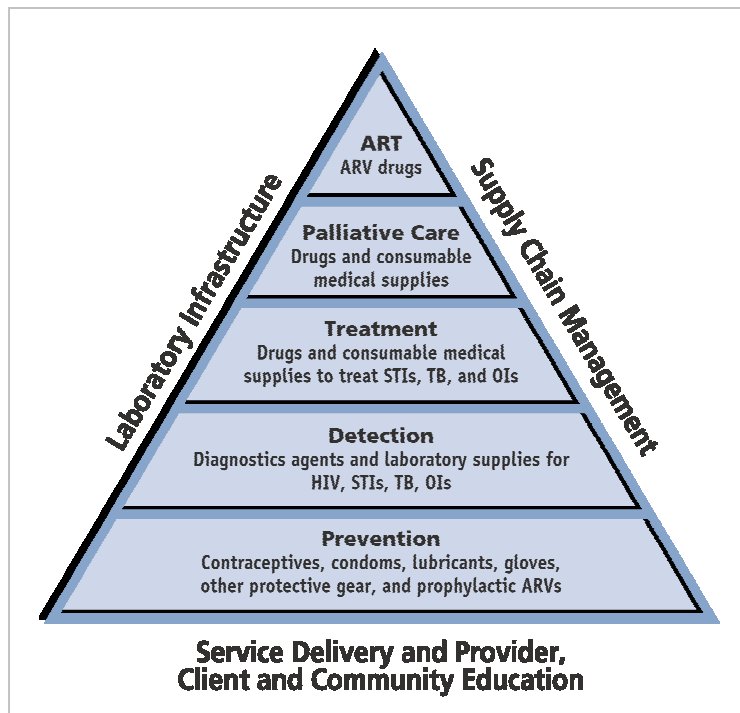
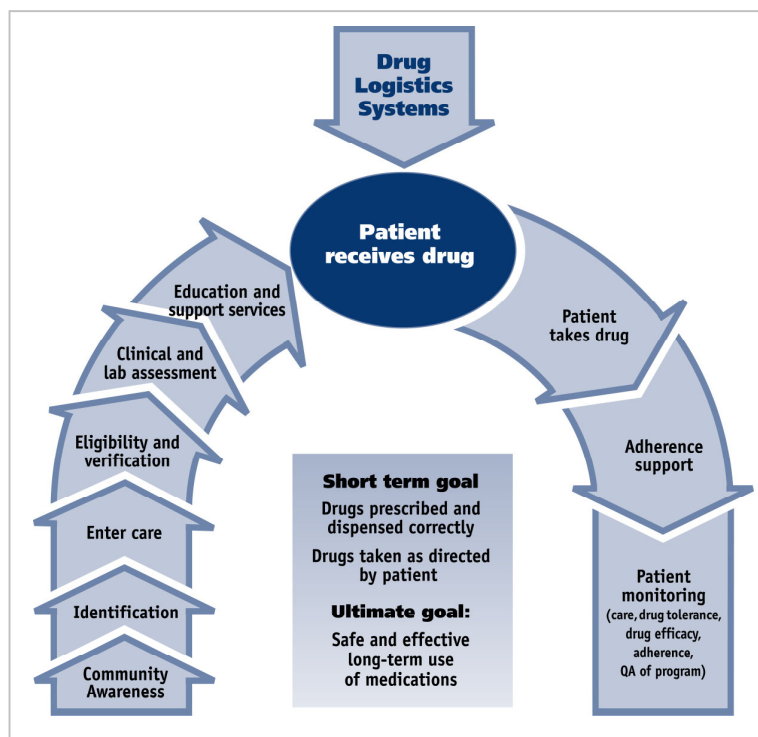


Figure 2 shows the steps and services that must be available to identify, enroll, and monitor patients in an ART program and the commodities that are required at each stage of a patient’s care. Figure 2 also emphasizes that, for an ART program, logistics management of ARVs does not end with delivering drugs to the pharmacy, but rather ends when the drugs are prescribed properly and dispensed correctly by providers, then taken as directed by patients. The logistics requirements for an ART program are unique because they must ensure safe and effective lifelong use of the medications. In resource-limited settings, this is a complex challenge.

Figure 2.
ART Implementation Framework



III. Methodology

Assessment Team

The four-week assessment was conducted from August 18 to September 12, 2003, by a six- to 10-member team, which included clinical, public health, policy, and logistics advisors from JSI/DELIVER, the JSI/IQA MTCT-Plus project, and USAID/Washington; a physician and two pharmacists from the MOH; and a representative from the voluntary sector in Tanzania. Information was collected through stakeholder interviews, facility assessments, and an extensive literature review. The members of the field teams conducting the facility assessments were selected to include a mix of clinical, pharmacy, and logistics background and skills.

Stakeholder Interviews

The assessment team conducted interviews with approximately 192 people from various government entities, including central-level and facility staff at the pilot sites and the sites selected for PMTCT expansion, donor agencies and international organizations, private and voluntary sector providers, employer-based programs, commercial sector distributors of ARV drugs, and consumer groups. People interviewed included HIV/AIDS program managers, researchers, clinicians, pharmacists and laboratory staff, pharmaceutical experts, procurement specialists and warehouse managers, NGO and FBO service providers, directors and health officers of donor organizations and Tanzanian companies, and people living with HIV/AIDS (PLWHA).

Facility Assessments

Field visits were conducted in five regions to assess logistics system capacity and site readiness to provide PMTCT services and eventually initiate ART at public sector health facilities selected for expansion of PMTCT in the Dar es Salaam, Mtwara, Iringa, Kilimanjaro, and Tabora regions. The assessment team conducted a total of 36 public sector facility assessments, including the five United Nations Childrens Fund (UNICEF)-supported PMTCT pilot sites (four referral hospitals and one regional hospital), the Muhimbili-Harvard PMTCT Research Clinic, and 24 of the 28 public sector health facilities selected for the first phase of the national expansion of PMTCT services (four dispensaries could not be reached within the time allotted for the field visits). Four additional district hospitals were visited during the assessment: Rombo District Designated Hospital (DDH) in Kilimanjaro Region, Vwawa District Hospital in Mbeya Region, Mvumi District Hospital in Dodoma Region, and Murgwanza District Designated Hospital in Kagera Region. In addition, the head of the PMTCT and ART program of the Muheza DDH in Tanga Region was interviewed by phone and e-mail and conducted a self-assessment of site readiness to provide PMTCT and ART. Four of the district hospitals visited are District-Designated Hospitals run by FBOs; Huruma District Hospital (Rombo DDH) in Kilimanjaro Region, Sikonge DDH in Tabora Region, Murgwanza DDH in Kagera Region, and Muheza DDH in Tanga Region. In addition, the team assessed seven private sector facilities, including NGOs, FBOs, and employer-based programs that provide PMTCT and ART services.

While this was a qualitative assessment of overall logistics system capacity and site readiness to provide PMTCT and ART services, individual sites were given a quantitative rating according to their stage of readiness (see Tools).

Table 1. Public Sector Health Facilities Visited

Region	Referral Hospital	Regional Hospital	District/Municipal Hospital	Health Center/Dispensary
DSM	Muhimbili Referral Hospital-Maternity Ward Muhimbili /Harvard Research Clinic		Amana Municipal Hospital Mwananyamala Municipal Hospital Temeke Municipal Hospital	Kigamboni Health Centre Magomeni Health Centre Mnazi Moja Health Centre Sinza Health Centre Mbagala Dispensary Tabata Dispensary
Iringa		Iringa Regional Hospital		Ipogoro Health Centre Ngome Health Centre
Mtwara		Ligula Regional Hospital		Likombe Dispensary Nanguruwe Health Center
Kilimanjaro	Kilimanjaro Christian Medical Center (Referral Hospital)	Mawenzi Regional Hospital	Rombo District Designated Hospital (Huruma District)	Majengo Health Centre Pasua Health Centre
Tabora		Kitete Regional Hospital	Sikonge District Designated Hospital (FBO)	Isevyva Dispensary Tumbi Dispensary Kiloleni Dispensary Upuge Health Centre Town Clinic Dispensary

Table 1. Public Sector Health Facilities Visited (continued)

Region	Referral Hospital	Regional Hospital	District/Municipal Hospital	Health Center/Dispensary
Mbeya	Mbeya Referral Hospital		Vwawa District Hospital	
Kagera		Kagera Regional Hospital (Bukoba)	Murgwanza District Designated Hospital	
Mwanza	Bugando Referral Hospital			
Tanga			Muheza District Designated Hospital	
Dodoma			Mvumi District Hospital	

Stakeholder interviews and facility assessments were conducted at seven private and voluntary sector sites and employer-based programs that already provide VCT, PMTCT, and ART services or are preparing to implement them.

Table 2. Private, Voluntary, and Employer-Based Programs Visited

Region	NGO/FBO	Employer-Based Program
Arusha	Selian Lutheran Hospital	
DSM	Pastoral Activities and Services for People with AIDS (PASADA)	Tanzania Breweries Limited (TBL)
	Shree Mandal Hospital	Tanzania Railways Corporation
Kilimanjaro		Tanganyika Planting Company
Dodoma	The Village of Hope	

Pharmaceutical company representatives were interviewed and visits were made to retail pharmacies that sell ARV drugs to learn about commercial sector supply of ARV drugs in the country.

Table 3. Commercial Sector Interviews and Visits

Pharmaceutical Companies	Retail Pharmacies
Cipla Pharmaceuticals, DSM	Victoria Pharmacy, Mwanza
Phillips Distributors Ltd, DSM	Ashif Latham Pharmacy, Mwanza
GlaxoSmithKline, DSM	Two retail pharmacies in Moshi, Kilimanjaro Region

Tools

This qualitative assessment was conducted using a series of questionnaires and facility assessment tools to guide stakeholder interviews and site visits. The tools were developed by JSI/DELIVER and the JSI/IQA MTCT-Plus Project and finalized by the assessment team after field testing. The assessment tools, attached as annex A of this report, included—

Stakeholder Interview Guides:

1. Central-Level Questionnaires: These questionnaires served as interview guides for discussion with stakeholders on policy, financing, program management, service delivery, human resources, research, public and private sector provision of HIV/AIDS services and logistics management of HIV/AIDS commodities.
2. Private Sector Providers Questionnaire
3. PLWHA Consumer Questionnaire

Facility Assessment Tools:

4. Facility HIV/AIDS Services Questionnaire
5. Facility Laboratory Services Questionnaire
6. Facility Logistics Management Questionnaire
7. Tool to Assess Site Program Readiness for Initiating Antiretroviral Therapy (ART)

After conducting the individual facility assessments, the team members used the *Tool to Assess Site Program Readiness for Initiating Antiretroviral Therapy (ART)* to assign a rating of the readiness of the site to provide PMTCT and ART. The six domains of a program assessed are: leadership and program model; services and clinical care; management and evaluation; staffing and experience; laboratory capacity; and drug management and procurement. Based on domain scores, sites are rated on a scale of readiness from the *Program Mobilization* stage (Stage 1) to an *Action* rating (Stage 4) and, ultimately, *Support, Maintenance, and Expansion* (Stage 5). For each stage of readiness, examples of technical assistance, training, and resources that may be needed to advance a site to a higher stage are suggested.

Findings

This section presents an overview of the current status of PMTCT, ART, and VCT services in the public sector and general findings related to MOH logistics system capacity to manage the key commodities needed for PMTCT, ART, and VCT. These are followed by specific findings from the facility assessments relevant to the readiness of public and private sector sites to provide PMTCT and ART. At the end of this section is a review of PMTCT and ART services currently being provided in the private and voluntary sectors.

I. Current Status of PMTCT, ART, and VCT Services in the Public Sector

Prevention of Mother-to-Child Transmission of HIV

PMTCT services in the public sector are currently provided in the five pilot sites, through the Muhimbili/Harvard Research Clinic in Dar es Salaam, and at a few FBO-administered District-Designated Hospitals. *Médicos del Mundo*/Spain also supports training and commodity procurement and distribution for VCT, PMTCT, and STI diagnosis and treatment in four districts in the Coast and Arusha regions. According to stakeholders and service providers interviewed at these sites, the key challenges affecting uptake and quality of PMTCT services include lack of personnel, insufficient training, inadequate counseling skills of health workers, and stigma about HIV. As a result of these and other factors related to access and quality of services, women do not return to the health facility to deliver and receive ART intervention for themselves and their infants. Strong linkages to the community and community involvement in isoniazid information, education and communication (IEC), recruitment, and follow-up of HIV-positive mothers and babies was identified as a key factor for success of PMTCT services.

The current donor- or research-supported PMTCT services and commodity logistics systems at the pilot sites cannot be replicated for expansion to the selected health facilities in the five regions. Support for staff salaries, training, infrastructure, commodity procurement and distribution, and provision of related services for free, e.g., HIV testing, antenatal, and delivery care, need to be provided through resources available to the MOH to expand PMTCT services. Basic infrastructure needs at some facilities include space for confidential counseling, space and equipment for laboratory services, and a reliable source of electricity and water. Many facilities are unable to ensure a reliable and uninterrupted supply of the drugs, laboratory reagents, and consumable supplies required to support PMTCT (see table 4). The majority of the health facilities visited during the assessment require significant resources to be able to provide the full range of PMTCT services and commodities required.

The commodities needed for PMTCT and for expansion to PMTCT Plus and ART include the full spectrum of commodities required to support a comprehensive HIV/AIDS prevention, care, and treatment program as indicated in table 4:

Table 4. PMTCT Services and Commodities

PMTCT Services	PMTCT Commodities
IEC in community	<ul style="list-style-type: none"> • IEC materials
During pregnancy (antenatal care)	<ul style="list-style-type: none"> • Rapid plasma reagin (RPR) syphilis tests • Other lab reagents and supplies for routine lab testing (hemoglobin, malaria) • HIV test kits • Vitamin and nutritional supplements • STI, OI, and TB drugs • Condoms
During delivery (OB modified care)	<ul style="list-style-type: none"> • Protective gear and supplies for infection protection • Nevirapine (tablets and syrup)
After delivery (postnatal care)	<ul style="list-style-type: none"> • Vitamin and nutritional supplements • Contraceptives and condoms • STI, OI, and TB drugs
PMTCT Plus & ART Services	PMTCT Plus & ART Commodities
HIV care and support	<ul style="list-style-type: none"> • Vitamin and nutritional supplements • Contraceptives and condoms • STI, OI, and TB drugs
Antiretroviral therapy	<ul style="list-style-type: none"> • ARVs • Lab reagents for monitoring ARV side effects and toxicity • Lab supplies for CD4 and viral load testing • Vitamin and nutritional supplements • Contraceptives and condoms • STI, OI and TB drugs

Current PMTCT guidelines state that continuous and comprehensive HIV care and treatment should be offered to HIV-positive mothers and infants before, during, and after delivery. Expansion of current PMTCT services will be achieved through integration of PMTCT into existing ANC services, which will then be expanded to PMTCT Plus to include antiretroviral therapy. A key challenge identified during the assessment is that while PMTCT services and commodities are being provided through several vertical programs within the MOH—i.e., Reproductive and Child Health Services (RCHS), Diagnostic Services Unit, National AIDS Control Programme (NACP) (STI and VCT programs), and pharmaceuticals and supplies unit (PSU)—minimal communication and coordination exists for integration and implementation of services and commodity procurement and distribution among these programs at the central level.

Introducing ART as a full-fledged HIV/AIDS treatment program will require reliable sources of supply and a robust logistics system for all of the above commodities, plus a guaranteed, lifetime supply of ARV drugs for PMTCT Plus and ART, and laboratory reagents and supplies for monitoring ARV drug side effects and toxicity, including CD4 cell counts and viral load testing, where feasible.

Antiretroviral Therapy

Antiretroviral therapy (ART) is provided on an extremely limited scale in Tanzania. Only 1,500 to 2,000 people are currently estimated to be under treatment with ARVs. Most ART is provided within the private and voluntary sectors through private providers and NGO- and FBO-operated hospitals and health facilities, as well as through several employer-based HIV/AIDS programs.

Important steps have been taken to introduce ART within the public sector health care delivery system, include the following:

- A comprehensive list of generic and branded ARVs has been registered for importation, including single-dose drugs, fixed-dose combinations, and oral solutions for pediatric patients.
- National Guidelines for Clinical Management of HIV/AIDS have been developed that include standardized ARV drug regimens for first- and second-line treatment with guidance on single drug substitutions for managing toxicity and adverse side effects for PMTCT and for post-exposure prophylaxis (PEP).
- Standard treatment guidelines (STG) for TB prophylaxis and chemoprophylaxis with cotrimoxazole for common opportunistic infections in adults and children are also included (United Republic of Tanzania MOH April 2002).

The MOH plans to expand PMTCT to PMTCT Plus at the original five pilot sites to be able to offer comprehensive HIV/AIDS care and treatment services, including ART, to eligible HIV-positive mothers, their children, and their spouses or partners by early 2004.

ARV Drug Use and Development of Resistance

As more ARV drugs enter Tanzania, there is growing concern among stakeholders about the development of ARV drug resistance in the country. Discussions with providers revealed that financial resource constraints and frequent disruptions in the supply of ARV drugs often prevent patients from continuing treatment. When drugs are available, many patients are able to access ARVs through financial support from friends and family. Adherence to treatment however, becomes problematic as *donor fatigue* sets in, and patients are left to pay for ARVs on their own.

ARVs, which often arrive in Tanzania in the form of *suitcase donations*, may come with a very short shelf life or are close to expiry. In some cases, facilities are given products that are not part of the treatment regimen being offered, or a donor providing vertical support to the program pulls out. The end result is that the individual is unable to maintain continued treatment. Inability to ensure a continued supply of ARV drugs is further complicated by the fact that some private sector physicians lack adequate training to prescribe the right medications or, a more common occurrence, treatment regimens are based on drug availability.

While no statistics are available on resistance, some private physicians reported resistance to AZT (ZDV) in 60 percent of their patients. Key stakeholders in the government, including clinical and technical experts, have many concerns about proper use by and compliance of patients using ARVs. To minimize emergence of ARV drug resistance, the government plans to adopt a policy of site certification based on clinical capacity that regulates the number of health facilities that can provide antiretroviral therapy.

Voluntary Counseling and Testing Services

Under the multisectoral approach to VCT, NACP has partnered with the following organizations to introduce and expand VCT services: African Medical and Research Foundation (AMREF) for counselor training; the Muhimbili Information Center; Tanzania Development and AIDS Prevention Trust (TADEPA) (an NGO working within Kagera Regional Hospital to provide in-hospital VCT services); Pastoral Activities and Services for People with AIDS (PASADA) (an NGO in Dar es Salaam that runs HIV care dispensaries); German Technical Cooperation Agency (GTZ) in Mbeya Region; the AXIOS Foundation for expansion of VCT services in regional hospitals; two NGOs in Kilimanjaro Region (Kinshai and Kiwakukki); and *Walio Katika Mapambano na AIDS Tanzania* (WMATA) (organization working with PLWHA).

The original plan for the national VCT program was to provide VCT services in at least one site in each of the 121 districts across the country. There are currently 240 VCT sites in the country, including NGO, FBO, and public sector VCT sites. In some districts, FBOs act as a district-designated hospital (DDH) for the government. Currently, FBOs serve more VCT clients than do government district hospitals. Since the government made the decision to provide VCT for free at public sector health facilities, uptake has increased significantly. Current reports indicate that 98 percent of clients who are counseled choose to be tested. VCT is also provided free of charge in NGOs and FBOs.

The government provides funding for training, distribution of HIV test kits, and supervision. Twenty national VCT supervisors have been trained and collaborate with regional supervisors in conducting team supervision visits to all public and private VCT sites. Supervision is conducted to identify strengths and weaknesses at each site to inform curriculum development and refresher training. National trainers are responsible for conducting VCT counselor training in the country. District councils are beginning to allocate their own funds for training to improve VCT services and are requesting that national trainers come to the districts to conduct the training.

Human Resource Challenges to Expansion of VCT

- In an effort to strengthen and expand VCT services, NACP has instructed districts to invite local NGO and FBO staff to attend VCT training events. In addition, competent counselors are being trained to train at FBOs and NGOs. VCT training is currently provided to existing staff only. A major constraint to national expansion of VCT is shortage of staff, and the few staffers who are available are overworked.
- An initiative to train ANC nurses to offer VCT as the entry point to PMTCT within the hospital ANC clinics and maternity wards at the PMTCT pilot sites was not successful. The PMTCT pilot site evaluation identified that most health care workers needed counseling skills. The national PMTCT guidelines are being finalized so that nurses providing PMTCT can be trained to offer VCT as part of their normal activities.
- Due to a national law that laboratory tests can be performed only by certified laboratory technicians, VCT counselors are currently being trained to do HIV testing under the supervision of a certified laboratory technician. Therefore, the volume of HIV tests that can be performed for VCT may be constrained by the availability of certified laboratory technicians at selected PMTCT sites.

Public and Private Sector Collaboration on VCT Capacity Building and Monitoring System

The national training curriculum for counselors and supervisors is being revised, and the VCT monitoring tools and reporting system is being developed and standardized in collaboration with NGOs and FBOs. Under the joint monitoring and reporting system, NGOs, FBOs, and public sector VCT sites send their VCT reports to the districts. The counselor working within the district collects and compiles the information on number of clients counseled and tested and the test results, and submits the report to the District Health Management

Team (DHMT) for planning. The district VCT reports are then submitted to the regional VCT supervisor, who collects them for the Regional Health Management Team (RHMT). The district VCT reports are also sent directly to NACP quarterly.

II. MOH Logistics Management Capacity

A major finding of the assessment is that the range of products required for PMTCT and ART are procured (or donated), distributed, and used across nearly every vertical program within the MOH. Therefore, the constraints on ensuring a reliable and uninterrupted supply of the commodities needed for PMTCT and ART are systemic in nature and will require system-wide interventions to strengthen logistics management of all essential health commodities within the MOH. Assessment findings related to each of the key logistics functions are addressed in this section.

Product Selection and Quality Assurance

National PMTCT guidelines have been drafted that clearly describe the services and commodities required to expand existing ANC services to include VCT, PMTCT, and ART. The PMTCT commodities required include IEC materials, rapid HIV test kits, RPR syphilis tests and other laboratory supplies, vitamin and nutritional supplements, supplies for health worker protection and infection prevention, nevirapine (tablets and pediatric syrup), contraceptives, condoms, drugs for treatment of STIs and OIs, and ARV drugs, once ART is introduced.

HIV Test Kits for VCT

HIV test kit selection has been standardized in Tanzania, and national HIV testing protocols have been developed and disseminated. Training and certification of VCT counselors is being implemented rapidly to facilitate expansion of VCT and PMTCT at public sector facilities. At the time of the assessment, the selection of HIV test kits and testing protocols was under review by NACP and CDC.

The HIV testing protocol currently in effect for VCT is as follows:

- Initial screening test is conducted using a Capillus HIV 1/2 rapid assay test. If the result is negative, the client is provided HIV prevention counseling and advised to return in three months for retesting to cover the window period for seroconversion.
- All positive blood specimens are retested for confirmation. Confirmatory testing is performed using the Determine HIV 1/2 rapid assay test. Results of the confirmatory test are given the same day.
- In the event of discordant results between the initial and confirmatory tests, the blood sample is sent to a regional hospital laboratory for tie-breaker testing with a long enzyme-linked immunosorbent assay (ELISA) (Vironostika Uniform II HIV 1/2 plus 0).

NGOs that procure their own HIV test kits are required to follow national HIV testing protocols for VCT, e.g., AXIOS that brings in its own supplies of Determine HIV 1/2 test kits.

Current use of Capillus HIV 1/2 rapid assay test kits, which require refrigeration, poses some constraints for health facilities with limited cold storage or unreliable supply of electricity. While a highly sensitive test for HIV in Tanzania, Capillus HIV 1/2 tests have greater training requirements than other simple rapid assay tests, especially for non-laboratory personnel. Use of HIV tests that require refrigeration may limit scaleup of VCT (and, therefore, PMTCT and other HIV prevention, treatment, and care services) because of inadequate cold storage capacity at health facilities.

Use of HIV tests for clinical diagnosis has not been officially recognized, so HIV tests for clinical diagnosis are being taken from stocks for blood safety and VCT. Quantities of HIV tests used for clinical diagnosis are not reported as such, and estimates of HIV test kit requirements reportedly are increased to include an additional percentage of test kits to account for clinical diagnosis. With the imminent arrival of ARVs, clinical diagnosis must be recognized as a use for HIV test kits; procurement and distribution of test kits for this purpose must be planned and budgeted for and forecast at the national level; and HIV test use should be recorded and reported at the facility level.

Only laboratory staff interviewed at the higher-level facilities (referral and regional hospitals) were able to answer questions on quality assurance procedures for HIV testing, which requires that 1:10 positive blood samples and 1:20 negative blood samples should be retested to ensure validity of test results. Most laboratory staff at health facilities were unaware of quality assurance procedures for HIV testing. Laboratory monitoring and supervision systems for ensuring compliance with quality assurance procedures were not in place at the sites visited during the assessment.

ARV Drugs

While ART has not yet been introduced within the public sector health care delivery system, important steps have been taken to lay the foundation for eventual initiation of ART. A comprehensive list of generic and branded ARVs has been registered for importation, including single-dose drugs, fixed-dose combinations, and oral solutions for pediatric dosing. National Guidelines for Clinical Management of HIV/AIDS (United Republic of Tanzania November 2002) have been developed that include standardized ARV regimens for first- and second-line treatment with guidance on single drug substitutions for managing toxicity and adverse side effects, for PMTCT, and for PEP. Standard treatment guidelines for TB prophylaxis and chemoprophylaxis with co-trimoxazole for common opportunistic infections in adults and children are also included (United Republic of Tanzania MOH 2002). The recent draft PMTCT Guidelines have revised the ARV regimen for HIV-positive mothers and infant post-exposure prophylaxis to recommend single-dose nevirapine at delivery. The National Essential Drugs List (NEDL), currently under revision, is expected to include all ARVs for PMTCT, PEP, and ART, in accordance with the established national treatment guidelines.

Private providers interviewed that do not have access to national standard treatment guidelines or have not received adequate training are prescribing and dispensing according to the ARVs currently available on the market rather than according to established ARV regimens. The lack of standardization of ARV treatment in practice not only compromises quality of care but also leads to risk of viral resistance.

Serving Customers

Ensuring product quality and availability are key logistics issues for quality of care in providing PMTCT and ART services. While improvements in overall functioning and sustainability of the logistics system for all essential health commodities are critical to ensuring that the right quantities of quality products reach the right places at the right time, ensuring that products are available at the right cost to the people who need them, and that they are used effectively to address needs.

Hospital-based vs. Home-based Delivery

The cost of hospital-based delivery and quality of care issues influence the fact that the majority of births (estimated at 60 percent) occur outside health facilities in Tanzania. This results in a significant dropoff in uptake of PMTCT, especially in areas where geographical access and community involvement in service provision do not facilitate follow-up or home-based delivery.

Current PMTCT guidelines recommend changing from the short-course AZT regimen before delivery to a one-time dose of nevirapine for mother and infant at delivery. Infant doses must be measured and administered according to body weight at birth (2 mg/kg body weight). The average dose of nevirapine is 0.6 ml per infant. An important logistics issue related to the supply of pediatric nevirapine syrup is that, once opened, the 240 ml bottles expire after two months. Therefore, 400 infants would need to be treated within the two-month time period to avoid wastage.

While it is easier to ensure correct administration of nevirapine within a hospital setting, logistics issues related to the correct measurement, packaging, storage, and timing of infant doses of nevirapine syrup in a home-based delivery setting restrict access to PMTCT for HIV-positive women who deliver at home.

Access to Family Planning Services and Commodities

Strengthening of family planning (FP) services and ensuring availability of contraceptives and condoms for HIV-positive women after delivery, as well as non-pregnant women at PMTCT sites, is a key intervention for prevention of mother-to-child transmission of HIV. Access to family planning services and commodities after delivery, and as a component of ongoing HIV care and support, is not consistent at PMTCT pilot sites or at the health facilities selected for PMTCT expansion. At some sites where family planning counseling is available, access to contraceptives and condoms is limited due to irregular supply to health facilities. Therefore, stronger linkages are required to fully integrate family planning services and PMTCT activities, and logistics management of contraceptives and condoms must be strengthened to ensure availability of these products for PMTCT clients. Access to family planning services and commodities is not available to HIV-positive women who receive PMTCT at the Catholic faith-based organizations visited during the assessment.

Cost of ARV drugs

At the current price of 1,000 Tsh per day for ARV drugs, access to treatment is unavailable to the vast majority of people who require ART in Tanzania. Financial resources for a lifetime supply of ARVs is beyond the reach of all but a relative few. Many patients eligible for ART at FBO-supported sites visited during the assessment are unable to initiate ART because they cannot afford the ARVs. Patients who have been able to initiate ART with support from family and friends when very ill, lose financial support after a period of time when the patient recuperates and the family can no longer sustain the resources needed for treatment. *Donor fatigue* of family and friends, which results in treatment interruption or inconsistent use of ARVs, leads to the emergence of resistant strains of HIV. Therefore, ability to pay greatly affects equity of access and ability to adhere to treatment.

The cost of ARVs to patients has yet to be addressed as a major determinant in equity of service provision and access to treatment. Pricing policies need to address the cost to clients according to ability to pay and availability of government subsidies (e.g., National Health Insurance Fund, Community Health Fund, user fees). Criteria to determine which patients qualify for free treatment need to be established, and access to ART for health workers needs to be addressed. Harmonization of pricing policies within the private sector should focus on provision of services and commodities to those with the ability to pay and should support voluntary sector provision of services and commodities to reach those who cannot pay, thereby also helping to share the burden on public sector health care's delivery system.

While the cost of ARVs has been recognized as a major constraint on access to ART, the purchasing power of the Clinton Foundation to negotiate lower prices with manufacturers for multiple country programs is expected to make drugs for ART and the treatment of OIs, laboratory reagents and equipment, and vitamin supplements available to Tanzania at reduced prices (United Republic of Tanzania September 2003a).

One important policy issue not addressed in the proposed HIV/AIDS Care and Treatment Plan is the pricing policy for determining cost to clients for the services and commodities that would be provided through the plan. While HIV testing is proposed to be offered free of charge as a routine health service, it is not clear how other treatment and care services, including ART, treatment of OI, and laboratory diagnosis and monitoring of HIV/AIDS patients on ART, would be charged.

Rational Use of ARVs

Another critical issue in quality of care is related to poor prescribing and dispensing practices exacerbated by an inconsistent supply of ARVs and problems with patient adherence to treatment regimens. Some private sector physicians (both for-profit and nonprofit) and pharmacists inadequately trained in ART are prescribing and dispensing ARVs incorrectly, without knowledge of dosing and/or drug interactions. There are reportedly many people on mono- and dual-therapy in Tanzania. While no statistics are available on resistance, some private physicians reported 60 percent of patients resistant to AZT (ZDV).

Funding for PMTCT and ART Commodities

National Level

Myriad international organizations, government entities, private, NGO, and voluntary sector partners provide financial and technical support for HIV/AIDS activities in Tanzania. Support for PMTCT currently includes funding and technical support in research, program management, service provision, and commodity procurement. Large infusions of new resources to support the government's plan to expand PMTCT services to all 21 regions of the country are expected to become available through the Global Fund Round Three Proposal, the U.S. President's Initiative and Emergency Fund, and the proposed HIV/AIDS Care and Treatment Plan being developed by the MOH and the Clinton Foundation. This will include funding for procurement of a broad range of HIV/AIDS-related commodities to support VCT, PMTCT, and ART.

TACAIDS will oversee the management and allocation of multiple sources of funding for HIV/AIDS activities through a National HIV/AIDS Fund to which development partners (donors), private sector entities (companies, foundations), and the government may contribute through a basket funding mechanism. Different funding accounts will be created to facilitate mobilization, disbursement, and accountability of resources to support HIV/AIDS activities at the national, local government, and community levels. The Global Trust Fund, a separate fund for managing allocations for HIV/AIDS received from the Global Fund to Fight AIDS, TB and Malaria (GFATM), will be established in accordance with GFATM requirements (World Bank 2003). While procurement of services and commodities is regulated by the Public Finance and Procurement Act of 2001, the Ministry of Finance and TACAIDS have yet to establish the mechanisms and quality assurance procedures for ensuring rapid and effective procurement and inventory management of HIV/AIDS commodities funded through the National HIV/AIDS Fund (World Bank 2003).

Current sources of support for HIV/AIDS commodities include the Japan International Cooperating Agency (JICA), which supplies STI drugs and supplies, rapid plasma reagin (RPR) syphilis tests, and HIV test kits for blood safety and VCT; CDC procures HIV test kits for sentinel surveillance; the Abbot Donation Program, which donates *Determine* HIV test kits for PMTCT; the Boehringer Ingelheim (BI) Donation Program, which donates branded nevirapine (Viramune®) for PMTCT; and the Pfizer Donation Program, which donates branded fluconazole (Diflucan®) for treatment of HIV-related opportunistic infections. Additional support for

commodity procurement will be provided through the World Bank TMAP, the Community AIDS Response Fund (CARF), and the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF).

The World Bank TMAP project will support designated Regional Facilitating Agencies, e.g., NGOs experienced in HIV/AIDS and working with communities, to assist districts in planning and implementation of HIV/AIDS activities through the Community AIDS Response Fund (CARF). Projects eligible for CARF funding may procure commodities for VCT; STI prevention and control, including condoms, home-based care, treatment mitigation for OI, and for AIDS, including nutritional supplements, PMTCT, and PEP. Procurement of ARVs under TMAP funding is confined to PMTCT and PEP. Drugs would be procured by Merk, Sharp and Dome (MSD), and non-drug items would be procured by the Medical Tender Board for the government (United Republic of Tanzania n.d./e).

The Elizabeth Glaser Pediatric AIDS Foundation is providing funding to the AXIOS Foundation in Tanzania to support PMTCT at 12 sites in the Morogoro and Kilimanjaro regions. Financial support to the facilities will be provided through bank accounts with the district councils to support, among other things, procurement of medicines and expendable medical supplies critical to PMTCT. It is expected that the facilities will order the drugs and supplies from MSD through the existing system for ordering and distribution of public sector health commodities.

A major challenge for the MOH will be to coordinate and manage the multiple sources of funding, technical assistance, and commodities provided through these partners.

Table 5. Sources of Funding and Funding Allocations for ARVs

Source of Funding	Amount of Funding Allocated	
World Bank TMAP ³	U.S.\$70 million not earmarked (ARVs may be purchased)	
HIV/AIDS Care and Treatment Plan (Clinton Foundation) ²	U.S.\$6,048,000	U.S.\$17,313,000
GFATM Round Three Proposal ¹	U.S.\$1,729,664.40	
Boehringer Ingelheim NVP Donation Program (for PMTCT)	Unlimited	
	Year 2004	Year 2005

Sources: 1 GFATM

2 (HIV/AIDS C and T Plan 2003)

3 World Bank Tanzania Project Appraisal, June 2003

Facility Level

Existing financing mechanisms to cover the cost of health services and commodities within the public sector health care delivery system include the National Health Insurance Fund, Community Health Fund, Drug Revolving Fund, government allocation of funds to MSD, and cost sharing through user fees. Availability of essential drugs, laboratory reagents, and infection prevention supplies is dependent on government allocations and management of local funding sources at health facilities. Purchasing of needed commodities is limited by insufficient resources in some of the health facilities visited, and in others, by unfamiliarity with the different financing mechanisms available, and lack of financial management skills restricts access to funds. At the health facilities visited, pharmacy, clinical, and administrative staff are responsible for monitoring health facility accounts at MSD and accessing the hospital drug revolving fund or the health center's cost-sharing funds for local drug purchases when MSD is stocked out, and they must manage reimbursement of drugs charged to the National Health Insurance Fund.

While HIV test kits (Determine, Capillus, and long ELISAs), contraceptives, condoms, Diflucan, STI drugs, and TB drugs are being provided free of charge through donation programs and donor-supported vertical

programs, access to services is limited when interruptions in supply require health facilities and patients to purchase these commodities with their own funds outside of the public sector drug supply system (with the exception of the TB/Leprosy program), or to wait until products become available again. At the time of the assessment, Diflucan had been stocked out for four months, and chronic shortages of STI drugs and RPR syphilis tests were reported at many sites. Lack of HIV test kits has also resulted in service disruption .

Logistics Management Information System

Given the lack of a logistics management information system (LMIS), current stock levels and consumption (quantities dispensed) of HIV/AIDS-related commodities in the public sector health care delivery system cannot be determined at this time. This information is available only for TB drugs and, to a lesser degree, for contraceptives through vertical LMISs managed by the national TB/L program and RCHS. Even when logistics data on stock on hand and consumption are available, the assessment showed that health facilities do not use the information for stock management or for calculating order quantities for resupply. Without logistics data on stock balances and consumption throughout the health care delivery system, MSD at the central level cannot plan procurements and efficiently manage the in-country supply pipeline. Decisions on commodity procurement and distribution are based on past quantities issued from MSD, incomplete and inaccurate service statistics and morbidity data from health facilities, and/or the amount and availability of funding for commodity procurement. This leads to stock imbalances throughout the supply pipeline and, ultimately, disruption of services and unmet client need.

The lack of an LMIS for managing the supply of HIV test kits has led to HIV tests for VCT and blood safety being distributed to health facilities as a “blind push.” This has resulted in ELISA tests being delivered to district hospitals without ELISA testing capability and health facilities receiving HIV tests that didn’t need them while others remained stocked out.

STI drug orders based on reported STI syndromes treated, rather than on actual consumption and stock data, and forecasted requirements that do not include quantities for buffer stocks have lead to widespread and chronic shortages of STI drugs at health facilities.

Forecasting

The PMTCT Coordinator in the Diagnostic Services Unit is responsible for estimating requirements for donated nevirapine and Determine HIV 1/2 test kits for the PMTCT sites, while the requirements for re-ordering donated Diflucan are prepared by the STI Program Coordinator. The donation requests are then submitted to AXIOS to be processed for resupply of these products. At the time of the assessment, it was unclear what data were being used and how the data were being collected to complete the AXIOS forms for resupply from the donation programs. In general, the sources and quality of data required for forecasting commodity requirements based on realistic service capacity, client needs, and in-country stock levels are either unavailable or unreliable, and no documented or standardized methodology for forecasting commodity requirements is followed in the MOH programs responsible for supplying PMTCT commodities. Because there is no standardized LMIS, essential logistics data on stock balances and actual consumption of commodities at health facilities are not reported to program managers or MSD, so they are not used to forecast commodity requirements or to make informed decisions about procurement planning, management of the supply pipeline, and distribution to health facilities.

Procurement

The health sector HIV/AIDS strategy addresses the importance of the procurement, storage, and distribution systems and the human resources needed to carry out these functions to ensure availability of the commodities needed to implement the priority HIV/AIDS interventions (United Republic of Tanzania MOH February

2003b). The Medical Stores Department (MSD) is the main government agency responsible for procurement, storage, and distribution of public sector health commodities, and the Tanzania Food and Drug Authority (TFDA) has the responsibility for efficient registration and quality assurance of all imported drugs and for monitoring pharmacy outlets throughout the country.

Role of PMTCT Secretariat in Coordinating Commodity Procurement

Significant logistics management expertise needs to be built within the current PMTCT Secretariat membership if, as has been suggested, the national PMTCT Secretariat is to take on the role of assessing program needs and coordinating commodity procurements and donations from various donation programs. Full-time attention is needed to—

1. Strengthen forecasting capacity for a broad range of commodity needs for PMTCT services across vertical programs.
2. Coordinate multiple sources of funding for procurement.
3. Align procurement lead times and shipment delivery schedules of multiple suppliers in accordance with the storage, inventory management, and distribution capacity of the in-country supply pipeline.

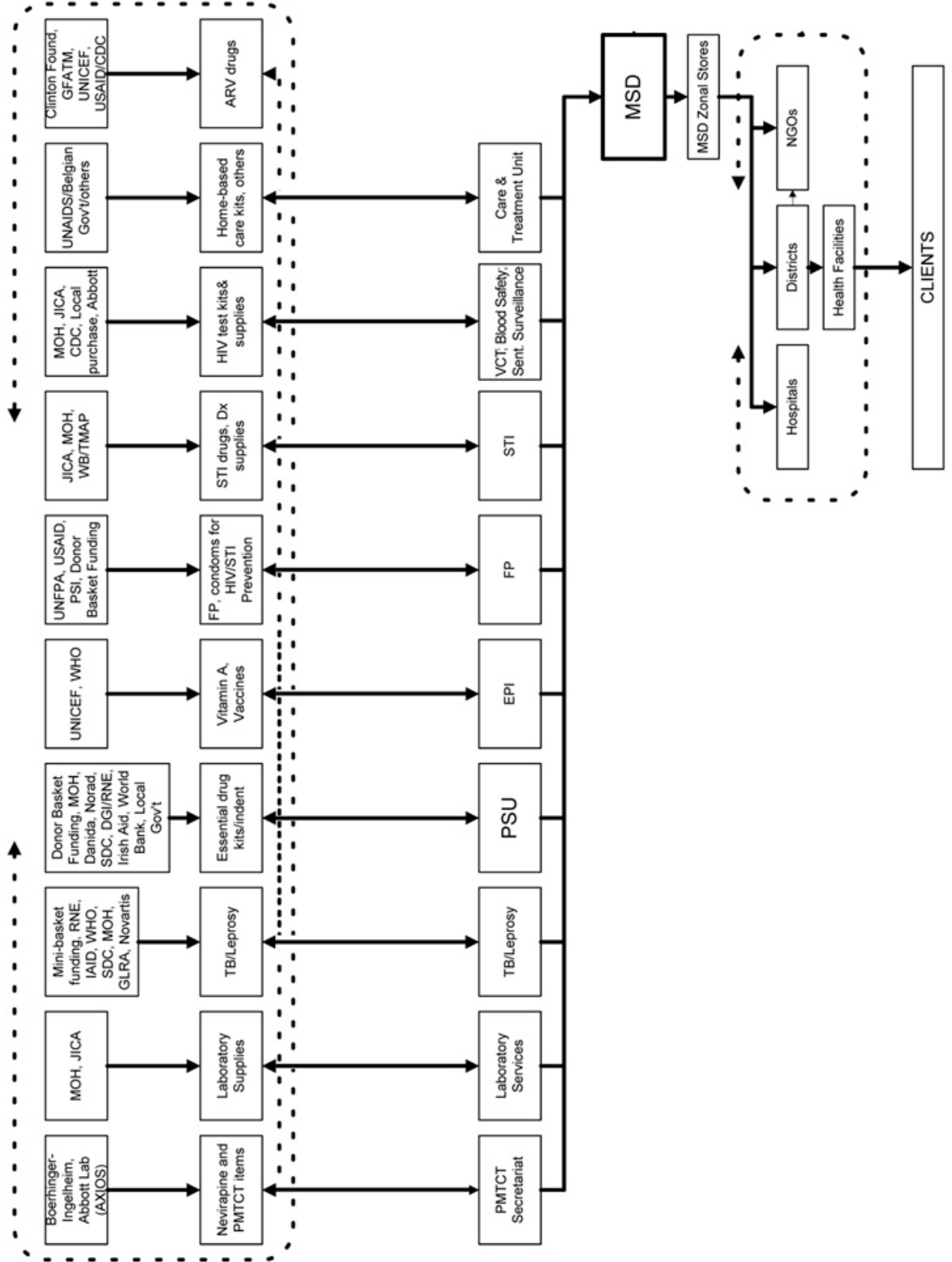
The above logistics management functions must be supported by an LMIS to verify stock balances and commodity use of any given product by level, by facility, and nationwide. A critical task of the PMTCT Secretariat will be to support implementation of the LMIS for HIV/AIDS commodities in Tanzania.

Procurement of ARVs is particularly challenging because of the nature of the treatment (ART is a life-long, triple-drug therapy requiring simultaneous availability of three different drugs in sufficient quantities at ART sites), and because of changing patient needs over time, which require a flexible and responsive procurement process to be able to change the products and the quantities being procured on relatively short notice. Availability of single drug substitutes as alternates due to drug toxicity and side effects, and fixed-dose combination drugs (FDCs) to reduce pill burden and facilitate adherence, pose additional challenges to forecasting and procurement of management of the ARV supply. To ensure a reliable and consistent supply of ARVs to ART sites where they are needed, it will be critical to coordinate procurement lead times and shipment delivery schedules with stock levels in the in-country supply pipeline.

Currently, there is no central coordinating mechanism or body within the MOH with sufficient authority and logistics management capacity to forecast commodity requirements to meet program plans and client needs, to coordinate commodity procurement and donations across programs, and to ensure functioning of the in-country supply pipeline.

Figure 3 illustrates the complicated supply environment of multiple sources of funding and suppliers of commodities for VCT, PMTCT, and ART and their distribution and use across multiple vertical programs within the MOH.

Figure 3. Sources and Distribution of Commodities



Inventory Management, Storage, and Distribution

All PMTCT commodities, except for ARVs for ART, are already distributed and used through several existing vertical programs in the public sector. Contraceptives and condoms are managed through the RCHS; RPR syphilis tests, STI drugs and (Diflucan®) from the Pfizer donation program are currently managed through the NACP/STI Program; TB drugs through the national TB/Leprosy program; OI drugs through the essential drugs program managed by PSU; and HIV test kits for VCT, sentinel surveillance, and blood safety are managed through NACP. Donated nevirapine (Viramune) from Boehringer Ingelheim and Determine HIV test kits donated by Abbott are managed by the PMTCT Coordinator in the Diagnostic Services Unit.

Inventory Control System

There is currently no established inventory control system for managing HIV/AIDS-related commodities. A routine ordering system, maximum/minimum stock levels that include buffer stocks, and standard inventory management procedures have not been established. There are no written procedures for ordering, storing, and dispensing drugs, laboratory reagents, and consumable supplies. Health facility staff are not trained in logistics management, and do not have written guidelines on how to manage commodities. Therefore, standard inventory management procedures for correctly calculating order quantities to maintain adequate stock levels and for storing and issuing/dispensing stock according to first-to-expire, first-out (FEFO) need to be established at all health facilities selected for expansion of PMTCT and eventual initiation of ART. Efficient inventory management of relatively short shelf life products like HIV test kits is particularly important to ensure use before expiry. (The shelf life of Capillus is currently nine–12 months and Determine is 12–18 months, under appropriate storage conditions.)

Inventory Management of ARVs

Although not all the health facilities visited manage Dangerous Drug Act (DDA) drugs, elements of the logistics system for DDA products could be applied to management of ARVs to enhance security in storage and distribution and to monitor drug use and stock balances at service delivery sites. These include—

- fewer authorized people to prescribe and dispense
- use of countersignatures for accountability
- higher security in storage and distribution
- returning filled prescriptions
- returning empty bottles or ampoules.

As with all other PMTCT products observed during the assessment visits, health facilities have no written procedures for ordering, storing, and dispensing DDA products.

The existing TB drug logistics system, while not fully replicable for management of ARVs for PMTCT and ART, does have some elements that could be adapted for ARVs. Specifically, TB drug record keeping for monitoring consumption and stock balances at health facilities could be adapted, as could the supervision system for monitoring drug use at facilities and reordering supplies.

While the TB program is a mature program with national reach and a well-established logistics system, specific characteristics of ARVs themselves and their appropriate use by providers and patients require special consideration when designing and implementing a logistics system. Some of the key logistics considerations for management of ARV drugs include—

- TB regimens are fixed (five drugs) versus wider selection of ARVs and ARV treatment regimens that must change over time in response to side effects, toxicity, and viral resistance.
- TB treatment regimen is eight months, while ARV treatment is lifelong and has important implications for ongoing community and home-based support.
- Like the TB drug logistics system, an appropriate inventory control system for maintaining a full (rather than rationed) supply of ARVs at each site offering this service is needed within the health system.
- While the TB program manages large buffer stocks at each level of the health care delivery system, the higher cost, stricter security requirements, and shorter shelf life of ARVs (18–24 months) require a more agile and flexible logistics system to manage smaller buffer stocks.
- Strict monitoring of inventory levels and secure storage facilities are needed because of the high price of ARVs. Their use for prolonging survival and improving quality of life makes them highly subject to pilferage and leakage to other markets.
- A reliable and uninterrupted supply of ARVs is absolutely critical given that more than 90–95 percent adherence to ART is required for the regimens to be effective over the long term. In a twice-a-day regimen, less than one dose can be missed every two weeks. Lower levels of adherence are associated with development of drug-resistant HIV.
- Combinations of at least three drugs are required for highly active ART, and maintaining equal stock levels of different combinations of drugs will be challenging for service providers.

Distribution of HIV Test Kits

Consignments of HIV test kits for both blood safety and VCT are authorized by NACP and delivered together through MSD to the regions and districts. Districts are demanding that the regions send the quantities of test kits allocated for the districts directly to the districts because regions that are supposed to be using long ELISA tests at regional hospitals are taking the rapid assay HIV tests (Capillus and Determine) designated for districts for ease of use and when volume of testing is low.

“If you don’t report, you don’t get HIV test kits” is the new rule for VCT services as described by the national VCT coordinator. If a health facility does not report on VCT services provided, it will not be resupplied with HIV test kits. Requests for HIV test kits are to be prepared by the regional VCT counselor and the Regional AIDS Control Coordinator (RACC), who sends the requirements and the VCT report to NACP at the national level quarterly. VCT counselors will be allowed to maintain a small stock of HIV test kits.

The first few months of HIV test kit distribution under the new rule have not been smooth. There was a crisis in Kigoma, where 70 clients were waiting for testing, but HIV test kits were sent elsewhere. Districts do not know when kits will arrive, and their staff are not trained in how to calculate order quantities. Distrust in the system is obvious, and staff do not currently have the necessary skills and tools to implement the reporting and ordering system for HIV test kits. A standard inventory control system and routine collection of logistics data to inform the procurement and distribution processes is clearly needed.

Storage

In general, storage space and conditions at the selected health facilities are adequate for nevirapine tablets and pediatric syrup for PMTCT, which do not require much additional space. However, many laboratory facilities at the selected PMTCT sites do not have adequate cold chain storage for HIV test kits and other laboratory reagents that require refrigeration. As PMTCT and VCT services are initiated at these health facilities, it is

critical to ensure that infrastructure and functioning equipment are in place to maintain the quality of HIV tests and other laboratory reagents in storage.

ARVs require high security in transport and in storage at health facilities due to their high value and life-saving potential. ARVs need to be stored in locked cabinets in secure storage areas under the supervision of a pharmacist. Space currently provided for DDA drugs at health facilities that manage these products may be used to store ARVs initially, but as ART services and the volume of ARVs managed increases, most health facilities will need additional secure storage space.

Human Resources

National Level

Currently, logistics management capacity for effective and efficient management of PMTCT and ART products needs to be built at the national level. Program managers, MSD, the PMTCT Secretariat, and other key government entities will need assistance to—

1. Implement the LMIS.
2. Implement standardized inventory management procedures for maintaining adequate stock levels and storage conditions, managing stock, and resupplying at all regional and district hospitals and lower-level health facilities.
3. Establish forecasting methodology and build capacity within the MOH for quantifying HIV/AIDS commodity requirements.
4. Strengthen coordination of financial resources for procurement of PMTCT and ART commodities at national and facility levels.

Facility Level

At the facility level, supply and management of PMTCT products is not coordinated among clinical, counseling, pharmacy, and laboratory staff involved in the provision of PMTCT services. Staff are not trained in when and how to monitor stock levels, when to order, how to calculate order quantities, how to respond to changes in demand/consumption, or what to do with expired product. PMTCT training has been limited to select maternal and child health (MCH) staff supported by donors and research projects and does not include other service providers (e.g., STI, TB clinicians), pharmacists, and laboratory technicians responsible for prescribing and dispensing PMTCT products.

At one hospital maternity ward visited, the first supply of one bottle of 60 nevirapine 200 mg tablets for PMTCT had recently been received into the pharmacy. The pharmacist, unaware of the dispensing protocols for PMTCT, had issued the whole bottle of 60 tablets of nevirapine to a patient who had presented at the dispensing window with a prescription from a hospital physician for three antiretroviral drugs for 30 days. The pharmacist noted *out of stock* on the prescription for the other two drugs and dispensed the bottle of nevirapine to the patient. When the PMTCT nurse came to the pharmacy for nevirapine for an HIV-positive woman about to deliver in the maternity ward, all the nevirapine had been dispensed.

This case illustrates the need for communication, sensitization, education, and training of service providers in a team approach to PMTCT and ART that includes health workers involved in other areas of care and drug management.

Community Involvement

Community involvement, a key factor in the success of PMTCT and ART services, varies depending on the type and level of the health facility. Some of the district health facilities visited have greater community involvement and are at a higher stage of readiness to implement PMTCT than some higher-level facilities. A regional hospital that may have more laboratory services available generally may not have well-established outreach and contact with the community to facilitate education, recruitment, and follow-up for PMTCT and ART patients.

Counseling and Counselors as a Cadre of Professionals

Most counselors are nurses, clinical assistants, lawyers, doctors, teachers, and pastors. Lawyers come from the association of lawyers, and people who are HIV-positive go to them for legal services related to their situation. Lawyers are finding that it is good to know how to provide some counseling on HIV prevention and testing services. Doctors want to know how to counsel their patients, and teachers provide supportive counseling in schools. There is growing interest in counseling training; however, no job description of a counselor exists. The biggest challenge for counseling is that it has not been recognized as a cadre or a profession. During the development of the Health Sector Strategy, the need for a specialization in counseling was identified. The Muhimbili University College of Health Sciences (MUCHS) has been identified to develop the field of counseling.

HIV/AIDS Policy and Implications for Logistics Management of HIV/AIDS Commodities

Health Sector HIV/AIDS Strategy for Tanzania, 2003–2006

The Health Sector HIV/AIDS Strategy developed by the Ministry of Health in February 2003 (United Republic of Tanzania MOH July 2003) describes the HIV/AIDS interventions and implementation framework of the health sector response to the National Multisectoral Strategic Framework on HIV/AIDS. Generally, the national response to HIV/AIDS is characterized by decentralization and empowerment of the community response with increasing responsibility for implementation of HIV/AIDS interventions by RHMTs and Council Health Management Teams (CHMTs) at the district level. The key components of the health sector HIV/AIDS strategy that govern the expansion of PMTCT and initiation of ART include:

- Integration of HIV/AIDS activities into all structures and functions of the MOH and all institutions in the health sector.
- Relocation of the National AIDS Control Program (NACP) as a special agency within the office of the chief medical officer (CMO) with responsibility for assisting all directorates, units, and sections of the MOH to integrate HIV/AIDS activities into their functions.
- Expansion of the NACP's role in providing technical assistance, guidance, and supervision to public and private sector health institutions in complying with established standards of practice in implementation of HIV/AIDS interventions.
- Clarification of the MOH's role as the authority for technical performance of health personnel in the districts vs. the President's Office of Regional Administration and Local Government (PORALG) and Local Government Authorities (LGAs) that have responsibility for administration of the same personnel.
- MOH to assume responsibility for communicating, guiding, and enabling LGAs to incorporate HIV/AIDS interventions of the national health sector HIV/AIDS strategy into local council health plans.

- Shared responsibility for the coordination of implementation of the national health sector HIV/AIDS strategy by the NACP, RHMTs, and CHMTs at the district level.
- HIV/AIDS interventions under the health sector HIV/AIDS strategy will be financed through the MOH annual budgeting process known as the Medium-Term Expenditure Framework (MTEF).

Commodity procurement, storage, and distribution is one of several identified cross-cutting issues that will have a significant impact on implementation of HIV/AIDS interventions and the overall success of the health sector HIV/AIDS strategy. Other cross-cutting issues include the expansion and quality of VCT services; reduction of stigma and discrimination; ongoing operational research; improvement of health services, specifically in laboratory services and human resources management and administration; and support and technical assistance to non-health sectors.

Second Health Sector Strategic Plan (HSSP), July 2003–June 2008

The Second Health Sector Strategic Plan (HSSP) for July 2003–June 2008, originally based on eight integrated strategies, recently incorporated the health sector HIV/AIDS strategy as Strategy Nine. Key elements of the health sector strategic plan include MOH commitment to integration of vertical programs in the health care delivery system; prioritization of human resource development, management, and remuneration as part of civil service reforms; and continuing devolvement of responsibility for planning and implementation of health services to regional and district levels in line with health sector reforms.

The implications of these reforms for integrated management of essential health commodities within the public sector are that capacity for logistics management of health commodities throughout the health care delivery system needs to be strengthened through the RHMTs and CHMTs. A LMIS for collecting and reporting logistics data on stock levels and commodity use, and standardized inventory management procedures for maintaining adequate storage conditions, managing stock according to first-to-expire, first-out (FEFO), and correctly calculating order quantities of health commodities, needs to be implemented at all regional and district hospitals and lower-level health facilities (United Republic of Tanzania MOH and JSI/DELIVER 2002).

Tax-Exempt Status of Donated Products

National legislation regulating tax exemptions for products donated from pharmaceutical companies is needed. A shipment of Pfizer-donated Diflucan[®] sat in the port unable to be cleared for two months because the tax-exempt status of pharmaceutical company donations had not been established. A one-time waiver for tax exemption was granted by the Treasury Department to release the Diflucan from customs. The Treasury Department has promised that new legislation will be passed to allow all drugs ordered by MSD and all donations (not only government to government but also direct donations from pharmaceutical companies) to be tax exempt. For now, the *220 Tax Exemption Form* is to be used and should be respected for future shipments of this type of donated products. Both nevirapine (Viramune) donated by Boehringer Ingelheim and Determine HIV 1/2 test kits donated by Abbott Laboratories fall under this category of donations. It is important to ensure the tax-exempt status of these products until legislation is formally passed to avoid delays in customs clearance that could cause disruptions in supply.

Procurement, Storage and Distribution of Drugs and Consumables under the HIV/AIDS Care and Treatment Plan Clinton Proposal)

The cost of ARVs has been recognized as a major constraint on access to ART. However, the purchasing power of the Clinton Foundation to negotiate lower prices with manufacturers for multiple country programs

is expected to make drugs for ART and treatment of OIs, laboratory reagents and equipment, and vitamin supplements available to Tanzania at reduced prices (United Republic of Tanzania September 2003a).

Medical Tender Board (MTB) purchasing would be facilitated through blanket contracts and purchase orders, and MSD would be responsible for customs clearance, storage, and distribution (United Republic of Tanzania September 2003a). Procurement, storage, and distribution alone, however, will not ensure a reliable and uninterrupted supply of drugs, lab reagents, and consumables to health facilities. An LMIS is needed for collecting and reporting data critical to forecasting commodity requirements to inform procurement decisions on product selection and quantities required, and for making decisions about management of the in-country supply pipeline for HIV/AIDS commodities. Standardized inventory control procedures for ordering and maintaining adequate stock levels of HIV/AIDS commodities at health facilities also need to be implemented.

One important issue not addressed in the proposed HIV/AIDS Care and Treatment Plan is the pricing policy for determining cost to clients for the services and commodities that would be provided through the plan. While HIV testing is proposed as a routine health service free of charge, it is not clear how other treatment and care services, including ART, treatment of OIs, and laboratory diagnosis and monitoring of HIV/AIDS patients on ART, would be charged.

Organizational Capacity for Logistics Management

PMTCT services and commodities are provided through various vertical MOH programs, but minimal communication and coordination exists among programs at the central level for integration and implementation of services and commodity management. Multiple sources of funding and multiple suppliers of PMTCT commodities further complicate the supply environment in which there is currently no central coordinating mechanism or body within the MOH with sufficient authority and logistics management capacity to communicate with government and donors on resource mobilization for commodity procurement; to forecast commodity requirements according to program plans and client needs; to coordinate commodity distribution across programs; and to ensure functioning of the in-country supply pipeline.

An example of the need for communication among the various stakeholders involved in forecasting, procurement, and distribution of PMTCT commodities is the fact that MSD is not informed of the arrival of pharmaceutical company donations and donor-procured commodities until they have arrived at customs; only then is MSD notified to provide clearance and storing. This does not provide MSD adequate time to prepare the storage space required, especially for products that may require refrigeration and for coordination of distribution schedules.

PMTCT Services Unit, National PMTCT Secretariat, and PMTCT Technical and Steering Committees

Following the decision to expand PMTCT services in Tanzania from five pilot sites to all 21 regions of the country by June 2006, a PMTCT Services Unit was established within the Directorate of Hospital Services, and a national PMTCT Secretariat was formed to coordinate and manage integration of PMTCT services into existing ANC/MCH clinics, laboratory services and training activities. The national PMTCT Secretariat is composed of members from the PMTCT Services Unit, NACP, RCHS, TFDA, Tanzania Food and Nutrition Centre (TFNC), the Diagnostic Services Unit, PSU, MSD and the health management information system (HMIS). The PMTCT Secretariat, which meets monthly, is supported by a PMTCT Technical Committee composed of the current PMTCT pilot site coordinators and individuals selected for their technical expertise. The role of the Technical Committee, which meets quarterly, is to review and evaluate all PMTCT proposals, plans, and progress reports; provide support to the PMTCT Secretariat, regions, and districts in overcoming challenges in implementation; and advise the MOH and international partners through the national PMTCT Steering Committee.

The PMTCT Steering Committee members include senior decision makers from the MOH, representatives of partners currently providing direct and indirect support to PMTCT services, and other international partners that provide or will provide funding and technical support for PMTCT activities (expansion by 2006).

Procurement, Storage, and Distribution under the Health Sector HIV/AIDS Strategy

It is unclear how NACP will oversee efficient functioning of the procurement, storage, and distribution system under the health sector HIV/AIDS strategy. It is also not clear how the TFDA will be strengthened to be responsible for obtaining the necessary quantity of commodities needed and for coordinating the supply of HIV/AIDS/STI drugs and commodities throughout the country (United Republic of Tanzania MOH 2003). Currently, none of these bodies (MSD, NACP, TFDA) has proven capacity for monitoring supply levels throughout the country, forecasting HIV/AIDS commodity requirements, or coordinating the multiple funding agencies and supply sources for HIV/AIDS commodities.

III. Site Readiness to Initiate PMTCT and ART

After conducting the individual facility assessments, the team members used the *Tool to Assess Site Program Readiness for Initiating Antiretroviral Therapy (ART)* to assign a site readiness rating to provide PMTCT and ART. In a few cases, program managers of FBO-supported programs used the tool to complete a self-assessment of their own site readiness to implement PMTCT and ART. The purpose of using the tool to assess site readiness is to assist individual sites, donors, and governments in selecting sites for introduction and expansion of PMTCT and ART and to identify specific areas in need of technical assistance.

Six program domains were reviewed to assess site readiness: leadership and program model; services and clinical care; management and evaluation; staffing and experience; laboratory capacity; and drug management and procurement. Areas within each domain are evaluated that help to assess capacity within the domain. So, for example, within Domain 2—Services and Clinical Care—PMTCT/ART service provision, comprehensive HIV care, physical space, and community involvement are assessed individually to give an average domain score. Based on the scores assigned for each domain, sites are then rated on a scale of readiness from the *Program Mobilization, Service Delivery Planning, and Preparation* stages (Stages 1–3) to an *Action* rating (Stage 4) and, ultimately, to *Support, Maintenance, and Expansion* (Stage 5). For each stage of readiness, the tool provides examples of technical assistance, training, and resources that may be needed to advance a site to a higher stage.

The findings from the site readiness assessments of 43 public, private, voluntary, and employer-based sites visited are summarized in the next section, and the individual site stage of readiness scores are presented in table 6. (A separate document with the individual Stage of Readiness Summary Assessment Reports for each site may be obtained from John Snow, Inc./DELIVER.)

Public Sector Health Facilities

PMTCT Pilot Sites and Research Projects

The original pilot sites and donor- and research-supported sites already providing PMTCT were scored at the highest stage of readiness of the public sector facilities visited, Stage 4 *Action* and Stage 5 *Support, Maintenance, and Expansion*. Considerable variance existed among these sites in terms of uptake of services (e.g., number of HIV-positive women returning to the facility for delivery or to pick up ARV medication for newborn, percentage of women accepting HIV testing) and degree of community involvement and follow-up of patients. The Medical Officer in Charge at one referral hospital stated that it was not cost effective for his staff to engage in community sensitization about HIV, recruit patients for testing and treatment, provide

follow-up after delivery, or provide home-based care and counseling for ART. These types of community-based services are considered better provided by voluntary sector religious organizations and district-level facilities that already have well-established linkages within their communities.

It was clear during the assessment visits that parallel, donor- and research-supported services and commodities would be unsustainable if support were withdrawn and the site had to depend on existing leadership and management capacity, staffing, clinical expertise, lab testing capacity, drug supply, and pharmacy management. At most of the sites where parallel systems exist, public sector clinical staff at the facility knew little about the PMTCT and VCT services, and nevirapine and HIV test kits for PMTCT were not stored, ordered, dispensed, or used by the hospital pharmacy and laboratory staff. Direct procurement, supply, and transport of commodities was provided to these PMTCT and VCT sites by the donor. Most of these sites, if scored according to current capacity without external support, would score at a significantly lower stage of readiness.

The implications for expansion of PMTCT to PMTCT Plus at the pilot sites and for initiation of PMTCT at the 28 selected health facilities are that significant resources and technical assistance will be needed to build capacity of existing personnel, service capacity, and infrastructure. This will affect the speed and effectiveness with which these services can be expanded.

Municipal Hospitals and Health Centers in Dar es Salaam

After HIV-positive women have been recruited from municipal hospitals and health centers in Dar es Salaam and have agreed to accept PMTCT, all laboratory and clinical services are provided by the Muhimbili-Harvard Research Clinic, and the patient stops going to the municipal hospital or health center. Experienced nursing staff who provide RCHS and ANC services at these sites do not receive PMTCT training and do not provide PMTCT-related services. Therefore, Amana and Mwananyamala municipal hospitals in Dar es Salaam were assessed at Stage 3—*Preparation*—because these sites will require considerable capacity building and funding to integrate all aspects of PMTCT into existing RCHS and ANC services.

District Hospitals and FBO-managed District-Designated Hospitals

District hospitals and district-designated hospitals run by FBOs were scored at Stages 3 and 4 for PMTCT and ART. This reflects the fact that these hospitals receive considerable support from donors (e.g., Vwawa district hospital in Mbeya supported by GTZ) or local FBOs (Murgwanza, Sikonge, and Muheza district-designated hospitals). In general, FBO-supported hospitals are more advanced in providing PMTCT and have already begun treating patients and health worker staff with ART. While FBO sites may have more clinical and laboratory expertise and stronger linkages with the community for follow-up, home-based care, and adherence support than do other public sector sites, they are often dependent on one-off, suitcase donations of ARVs, which leaves them vulnerable to supply interruptions and unable to comply with ARV regimens.

Regional Hospitals

One of the regional hospitals visited during the assessment scored at Stage 3, and all others at Stage 2. Lack of clear leadership for program implementation, limited confidential space for counseling, little integration between the MCH services and other services (HIV/AIDS, STI, VCT, TB), and general lack of awareness about policies and procedures related to PMTCT were common at the Stage 2 sites.

Health Centers and Dispensaries

In several of the selected sites for PMTCT expansion, the staff had not heard of PMTCT and did not know they had been selected as a site for initiation of this service. In others, although unfamiliar with PMTCT,

well-established RCHS and ANC services with strong community linkages, leadership and teamwork at the health facility, and proximity to an MSD zonal store earned the site a Stage 3 rating for readiness to initiate PMTCT. Most health centers and dispensaries had very limited laboratory capacity, either because trained laboratory technicians could not perform tests due to lack of equipment or non-functioning equipment, or because of a lack of laboratory reagents and supplies required for testing. In many sites, lower cadres of laboratory staff are performing the job of higher-level positions. For example, laboratory assistants were found to be performing the job of laboratory technicians. This is also common with pharmacy staff, where pharmacy technicians or nurses are performing the work of pharmacists.

The key areas identified during the assessment that most affect site readiness to initiate PMTCT and ART services at health facilities include—

- Human resources—number and capacity, those staff available are overworked.
- Laboratory infrastructure and capacity (HR capacity, space, equipment, availability of lab supplies, quality assurance).
- Reliability of sources of supply and logistics system capacity to ensure consistent, full supply of PMTCT-related commodities in-country (HIV test kits, nevirapine, contraceptives, condoms, supplies for infection prevention and biohazardous waste disposal).
- Community linkages and referral services.
- Counseling cadres and services.
- Patient follow-up and home-based care and adherence.

Recognizing that some health facilities are at a higher stage of readiness than others to initiate PMTCT in terms of personnel, services, and infrastructure, recommendations include the following:

1. Initiate PMTCT services first at those facilities that are at a higher stage of readiness where possible.
2. Focus efforts and allocate resources to build capacity at those facilities that require more attention for startup, concentrating on the areas of need identified in the individual site reports of stage of readiness.
3. As part of VCT training activities, include VCT counselors at PMTCT sites in training for logistics management of HIV test kits.

Private and Voluntary Sector Facilities

Private providers, NGOs, FBOs, and employer-based program sites that already provide PMTCT and ART services are at a higher stage of readiness in terms of leadership and program model, clinical care and laboratory services, staffing and experience, management, evaluation, and community involvement, but they are constrained by unreliable sources of supply and inefficient logistics systems for ensuring full supply of needed commodities.

Most private and voluntary sector facilities visited have adequate laboratory infrastructure and capacity to provide PMTCT services. For expansion to PMTCT Plus and ART, some sites need to create or strengthen the referral mechanisms for access to more sophisticated laboratory diagnosis and monitoring. Community linkages are well established for recruitment of and follow-up with clients for VCT and PMTCT, to support home-based delivery and provide home based-care and adherence support for ART. Table 6 presents the stage of readiness of each of the public and private sector sites visited to implement PMTCT and ART services.

Table 6. Site Stage of Readiness Scores for PMTCT and ART

Region	Public Sector Health Facilities	Stage of Readiness	
		PMTCT	ART
Dar Es Salaam	Amana Municipal Hospital	3	3
	Kigamboni Health Centre	3	N/A
	Magomeni Health Centre	3	2
	Mbagala Dispensary	1	1
	Mnazi Moja Health Centre	2	2
	Mwananyamala Municipal Hospital	3	2
	Sinza Health Centre	2	N/A
	Tabata Dispensary	2	N/A
	Temeke Municipal Hospital	2	2
	Muhumbili Referral Hospital -Maternity Ward	4	3
Muhimbili /Harvard PMTCT Research Clinic	5	N/A	
Dodoma	Mvumi District Hospital	4	4
Iringa	Iringa Regional Hospital	3	3
	Ipogoro Health Centre	2	2
	Ngome Health Centre	3	2
Kagera	Kagera Regional Hospital (Bukoba)	5	2
	Murgwanza District-Designated Hospital	4	N/A
Kilimanjaro	Kilimanjaro Christian Medical Center (Referral Hospital)	4	4
	Mawenzi Regional Hospital	2	2
	Majengo Health Centre	3	2
	Pasua Health Center	3	2
	Rombo District-Designated Hospital (FBO)	3	3
Mbeya	Vwawa District Hospital	4	2
	Mbeya Referral Hospital	4	2
Mtwara	Ligula Regional Hospital	2	2
	Likombe Dispensary	1	1
	Nanguruwe Health Center	2	2
Mwanza	Bugando Referral Hospital	4	3
Tabora	Kitete Regional Hospital	2	2
	Isevy Dispensary	1	1
	Town Clinic Dispensary	1	1
	Kiloleni Dispensary	1	1
	Upuge Health Centre	1	1
	Tumbi Dispensary	1	1
	Sikonge District-Designated Hospital (FBO)	3	3
	Muheza District-Designated Hospital (FBO)	4	4
	Private and Voluntary Sector, Employer-based Programs	PMTCT	ART
Arusha	Selian Lutheran Hospital (FBO)	5	5
Dar Es Salaam			
Private Hospital	Shree Hindu Mandal Hospital	*	*
Employer-based	Tanzania Breweries Limited	*	*
Employer-based	Tanzania Railways Corporation	*	*
	PASADA (FBO)	4	4
Kilimanjaro			
Employer-based	Tanganyika Planting Company	*	*
Dodoma	Village of Hope (FBO)	5	5

* Sites/programs where key stakeholders were interviewed but site stage of readiness was not assessed.

IV. Private Sector Provision of PMTCT and ART Services

Private sector involvement in health care provision, specifically for ART, has been increasing rapidly in Tanzania. With the exception of nevirapine and AZT for PMTCT, ARVs have been largely absent in the public sector, and the private sector has stepped in to meet the growing demand for PMTCT and AIDS treatment. Fifty to 60 percent of all hospitals are for-profit, and the other 40 percent comprise government hospitals. Many of the services in government hospitals are provided through not-for-profit groups, including FBOs.

The private sector encompasses a wide array of players; the assessment team interviewed and visited retail pharmacies and ARV wholesalers, for-profit health care providers, employer-based programs, and faith-based and other nonprofit health care organizations. The Site Readiness Tool was applied to nongovernmental facilities offering PMTCT and/or ART to provide an understanding of service and logistics capacity in the private sector.

Private Providers

Although the government does not provide ART in public sector programs, it has recognized that many PLWHA are willing and able to pay for such services, so it permits private sector organizations to procure and provide ARVs in their own facilities. Private sector stakeholders interviewed estimated that about 1,500 to 2,000 people are on ARVs in Tanzania, the vast majority of whom live in Dar es Salaam and receive their drugs through the private sector.

Nongovernmental and Faith-Based Organizations

A variety of NGOs and FBOs provide a range of services in HIV/AIDS care, support, and treatment. Not surprisingly, these organizations have strong community linkages and are working with local governments, as part of health sector reform, to respond to the growing demand for HIV prevention and treatment services. Many of these programs work autonomously in peri-urban and rural areas and, thus, do not always have linkages with other nongovernmental groups working in HIV/AIDS. Similar to the public sector, they are faced with shortages of ARVs and other drugs and supplies, often due to limited purchasing capacity. Those NGOs and FBOs that provide ART do so on a limited basis and often at cost to patients.

Services

NGOs and FBOs have been particularly strong in providing home-based care, mostly for basic drugs and psychosocial support. For example, The Anglican Church of Tanzania (ACT) provides antibiotics, antifungals, aspirin, Panadol, and spiritual support to PLWHA. Furthermore, it recognizes the ABC approach as a way to save lives and has developed a national policy to guide its activities. Key interventions include home based care (HBC), care of orphans and vulnerable children, behavior change communications (BCC) targeted to youth, VCT, and PMTCT. Selian Hospital in Arusha also has extensive community involvement, working with a group of 100 PLWHA, youth, religious leaders, and teachers. It offers PMTCT and ART for individuals who have the ability to pay; since July 2002, six women have received nevirapine, and, as of January 2003, 15 people have begun ART.

Organizations such as the AXIOS Foundation are working in established ANC sites to provide PMTCT. The AXIOS Foundation is partnering with a number of international and local NGOs and FBOs to provide pregnant women with individual counseling and testing through an opt-out strategy. Women who test positive are given nevirapine and comprehensive care, such as treatment of STIs, OIs, and TB. Because so many women in Tanzania do not deliver at a health facility, AXIOS plans to educate and train registered traditional birth attendants (TBAs) in PMTCT, who will go to mobile clinics to pick up nevirapine to take to

women at home. On the other hand, *Médecins du Monde* is working at the tertiary level to provide PMTCT at referral hospitals. These sites are part of the five UNICEF-supported pilot sites, and PMTCT services are offered there through a vertical program. Although UNICEF support recently ended, MDM France is still working with the PMTCT program to ensure quality care and provision of services to each ANC client. Providers in this program are adequately trained, follow up with patients at home, and have strong linkages with the local community.

Logistics

One of the main challenges faced by these NGOs/FBOs is lack of funding for ARV procurement. ART through FBOs is self-pay, with the exception of several FBOs that provide ARV drugs free of charge to their staff. Another challenge is the unreliable supply of drugs and supplies, whether received through MSD or from donors. Many of these organizations are supported by donors who bring in ARVs and other drugs in the form of *suitcase donations*. As discussed earlier, this hampers the ability to provide a continuous supply of ARVs to patients who need ongoing treatment, especially when donors pull out. In addition to struggling with logistics issues, NGOs/FBOs deal with the high costs associated with providing ART, human capacity constraints, and lack of strong public-private partnership.

The Christian Social Services Commission (CSSC), an umbrella organization providing coordination and technical support for social services provided by faith-based organizations, plans to collaborate with the PMTCT Secretariat to facilitate access to free commodities, such as Diflucan, for church-supported hospital HIV/AIDS programs. The CSSC will be responsible for coordinating private-public partnerships for free supplies directly with the MOH units responsible for the various donation programs.

Employer-Based Programs

No national insurance schemes cover ARVs; most initiatives are employer-based and provide free medical care to employees and dependents. PMTCT is not provided, but women are referred for these services. Eligible women receive comprehensive HIV/AIDS care, including ART. Laboratory capacity and quality assurance are adequate, and patients are referred for laboratory services to referral and regional hospitals when needed. Employer-based programs purchase branded ARVs from local pharmaceutical suppliers. Supplier shortages due to lack of a logistics management system that allows them to monitor customer stock balances and consumption and plan for production and procurement have led to rationing of ARVs among patients.

The National Bank of Commerce, Tanzania Railways Corporation, Tanzania Breweries Limited, Tanzania Harbor Authority, and Tanganyika Planting Company are among the few companies providing ART to employees and their families through an employer-based health care infrastructure. Discussions with Tanzania Railways Corporation and Tanzania Breweries Limited not only provided useful information about the HIV/AIDS services offered by employer-based programs, but also revealed further insights on how they deal with the various challenges related to product and patient selection, financial constraints, quality care and treatment, and logistics management of ARVs.

Tanzania Railways Corporation

Services

The Tanzania Railway Corporation (TRC), a 100% government-owned entity, currently offers free medical services, including antiretroviral therapy to employees and their dependents through a network of 13 dispensaries. These dispensaries do not provide in-patient services, however. Eighty-three people currently receive ART through the TRC network and referral hospitals. Estimated HIV prevalence among employees

and dependents is 10–12 percent. Of those who test positive, approximately 50 percent are clinically eligible for ART. Before starting antiretroviral therapy, a psychosocial and clinical assessment of the patient is conducted, including counseling on adherence and side effects of the medications, dietary counseling, lifestyle changes, and secondary HIV prevention. TRC also includes financial counseling and planning for employees who must pay for their own ART services and drugs after retirement at age 55.

TRC management's commitment to HIV/AIDS services includes providing ART for HIV-positive individuals identified through VCT. All 13 TRC dispensaries provide VCT services, although laboratory HIV testing is not performed on site. Blood samples are sent to the nearest referral hospital laboratories for testing and results are returned to TRC through a confidential coding system. TRC is considering expansion of services to include HIV testing on-site with rapid assay HIV tests, and they would like to obtain HIV test kits from the MOH. The TRC has no plans to provide PMTCT as neither in-patient medical services nor labor and delivery services are provided at TRC dispensaries. All HIV-positive pregnant women (employees or spouses), are referred to government referral hospitals for PMTCT, and eligible women may receive antiretroviral therapy through TRC health services.

To date, TRC has been able to cover the cost of antiretroviral drugs, which are purchased from local suppliers. The cost of ARVs currently consumes 25 percent of the HIV/AIDS services operating budget. The TRC HIV/AIDS budget provides integrated services for HIV-related conditions, including purchase of antiretroviral drugs. Drugs, laboratory reagents, and consumable medical supplies for diagnosis and treatment of opportunistic infections, STIs, and reproductive health services (e.g., pap smears and contraceptives) are covered under this budget. Services and commodities for diagnosis and treatment of other infectious diseases (e.g., malaria, pneumonia) are covered under a separate budget.

Logistics

The TRC Chief Supplies Manager tenders and negotiates prices for antiretroviral drugs from local suppliers Phillips, Cipla, and a local distributor. Generally, ARVs are delivered to the central stores in Dar es Salaam the same day, then hand-carried by nursing assistants who travel on TRC trains, buses, and motor trolleys to deliver the drugs directly to the Medical Officer responsible for ART patients in the corresponding country zone. Patients go to their local TRC dispensary to pick up their drugs directly from the Medical Officer.

Given the nature and cost of ARVs and experience with drugs disappearing, TRC policy is to purchase a one-month supply only for the number of patients currently on ART. Patients come at the end of the month to receive their supply for the next month. The central stores in Dar es Salaam and the pharmacy stores at TRC dispensaries do not keep buffer stock. Recent supplier shortages have resulted in rationing of nevirapine, where supplies for only five, seven, or 14 days were meted out. Current expenditures for ARVs are 12 million Tsh per month.

While maintaining a three-month buffer stock would ensure against stockouts, and thereby prevent treatment interruption and potential viral resistance in patients, it would mean storing 36 million Tsh worth of ARVs, which would be costly to TRC and raise concern about security for ARVs in the health facilities.

Tanzania Breweries Limited

Services

Tanzania Breweries began providing free antiretroviral therapy to its employees in April 2003, through its outpatient clinical facilities in breweries located in Dar es Salaam, Moshi, Arusha, and Mwanza. Before the beginning of the program, the medical director attended training in ART at the parent brewery company in South Africa. There are currently eight patients on ART out of approximately 1,030 employees nationwide. In the event of complications, patients are referred to the private Shree Hindu Mandal Hospital.

The clinics provide a range of HIV/AIDS health services, including syndromic management of STIs, treatment of OIs, and VCT through linkages with AMREF. Since the introduction of ART, demand for VCT services has greatly increased. However, PMTCT is not available, and pregnant women do not currently receive HIV counseling as part of their antenatal care.

ART coverage is provided to the employee, the spouse (including multiple wives, if that is the case), and three children. Patients see a nurse-counselor, who is the only person to know the patient's status, to maintain confidentiality. Lab results and paperwork are referred to the brewery physician, who does not see the patients personally, but recommends treatment action to the nurse.

HIV prevention awareness has been a very strong program through the brewery network, including the truck drivers. Free condoms are readily available in rest rooms throughout the breweries. The few reported cases of STIs among workers point to the success of the prevention program.

The medical director would appreciate being included in government-sponsored clinical and logistics training related to use of ARVs.

Logistics

The physician, counselor, and pharmacist decide on the orders together. The only training they have received was from pharmaceutical representatives and did not include logistics management. Tanzania Breweries purchases branded ARVs at preferential prices through Phillips distributors and, soon, GlaxoSmithKline.

Patients are given a one-month supply of ARVs. Because of confidentiality, the ARVs are stored on a table in the office of the brewery physician rather than in the pharmacy. At the time of the assessment there was an overstock of Zerit pediatric formulation, which was going to expire in January 2004. The shelf life and quantities of adult formulation ARVs were within range of being used prior to expiry. However, the stocks available were part of the first lot purchased, and no resupply had been undertaken. There were no stockkeeping records to provide the data needed for resupply decisions.

The Tanzania Breweries program is still in its infancy. Clearly, as its program expands, Tanzania Breweries will need to formalize the logistics management of ARVs to include resupply intervals, as well as buffer stock, to prevent stockouts and wastage. The staff should be informed of PMTCT, how to refer patients to available services, and how to seek additional training in HIV care and treatment, including adherence support.

V. Commercial Sector Distribution of ARV Drugs

Generic ARVs

Services

Cipla, an Indian-based pharmaceutical company and the only provider of generic ARVs in Tanzania, currently provides drugs to a number of private hospitals and two retail pharmacies in the country. Approximately 800 patients use Cipla-manufactured ARVs. Triomune, a fixed-dose combination drug, became available to Tanzanians in April 2003. Since its introduction, 500 patients have begun treatment with Triomune; of these, 200 receive the drug free of charge through FBOs, and approximately 300 receive treatment through self-pay. Generic Triomune, the cheapest option for ART, costs a patient approximately 33,000 Tanzanian shillings per month. Branded ARVs, the more expensive alternative, can cost up to 80,000 shillings per month. Most of the patients on branded ARVs are paying 42,000 to 82,000 shillings per month for first-line treatment. Although sites must have government authorization to provide ARVs, many unauthorized pharmacies reportedly sell these drugs at much higher prices. One pharmacy provided a client with three different prescriptions based on the *severity of the disease*, and prices ranged from 55,000 to 290,000 Tanzania shillings per month.

Logistics

Cipla uses sales trend data to develop its forecasts/orders and monitors and adjusts these monthly. The Cipla representative submits a three- to six-month forecast every month, along with his order. He receives the order one month later. It can take up to 15 days for inspection, then the ARVs can be sent to the sites that ordered them. Cipla contracts with Salaama Pharmaceuticals to warehouse and distribute (transport) incoming shipments of ARVs to the two retail pharmacies accredited by the military and directly to the hospitals providing ART. The Cipla representative handles all the transactions. These combined efforts have prevented the company from experiencing stockouts; however, some challenges remain.

Cipla often receives personal requests for ARVs, but refers individuals to physicians who offer ART. In instances where physicians want to add more patients, Cipla delays their requests until Cipla's stock levels in Tanzania have adjusted to the increased demand and can allow for expansion. For example, Cipla originally provided services for 500 patients and was asked to provide for 100 more. Cipla delayed initiation of treatment for these patients until the company could ensure consistently full supply for all patients on ARVs.

Both the private and public sectors will need to plan scale-up carefully to ensure that patient numbers do not outpace the supply of ARVs and allow the ARV supply chain to prepare to respond to increased demand.

Branded ARVs

Services

Manufacturers of branded ARVs, specifically Bristol, Myers, Squibb (BMS), GlaxoSmithKline (GSK), and MSD, are participating in the Accelerated Access Initiative (AAI) in Tanzania. The AAI provides a mechanism for sites to receive branded ARVs at a reduced price. Before initiation of AAI, Phillips Distributors Limited sold ARVs for only about 100 patients throughout Tanzania. Since the AAI began, patient numbers have increased rapidly, from 350 in May 2003 to 400 in June, reaching a plateau of about 500 in July and August within the same year. (Including the non-AAI clients, approximately 600–700 patients are estimated to be on branded ARVs.) To participate in the AAI, a site must be a registered hospital and fill out an application form. A pharmaceutical representative visits the site and meets the physician to assess capacity to provide ART. If accepted, the site must sign a contract with the pharmaceutical company

that states the number of patients it is going to treat. Physicians are provided with information and literature on ARVs. All of the physicians participating in the AAI reportedly follow protocols in the National Guidelines for Clinical Management of HIV/AIDS. Although ARVs are tax-free, pharmaceutical companies must pay 2 percent free on board (FOB) to the TFDA. The sites are allowed to charge a 5 percent markup to cover the costs of storage (2.5 percent) and product management (2.5 percent).

To avoid the 5 percent markup, patients often go directly to the distributor. Phillips reported that patients arrive with a one-month prescription from their physician. A major problem is that more providers, such as gynecologists, surgeons, and general practitioners, are starting to prescribe ARVs to clients, and Phillips has found frequent dosing and drug interaction errors in new prescriptions. Thus, Phillips's pharmacists sometimes spend as much as 30 minutes providing information and adherence counseling to patients.

Logistics

GSK and Phillips both conduct their own forecasting and procurement. The biggest logistics issue faced by the wholesalers is that their clients, (pharmacies, hospitals, employer-based programs) usually order when they have stocked out. Clients need to be trained in logistics, particularly forecasting, and need to maintain buffer stocks. Another major problem is security. GSK brings in ARVs by air freight and, until recently, Phillips did the same. While awaiting customs clearance, Phillips had U.S.\$37,000 worth of ARVs stolen from the airport and now uses DHL for door-to-door service. GSK has also experienced substantial losses of ARV drugs while in customs, so it takes precautions as well to monitor the ARV supply as soon as it has arrived in-country.

Retail Pharmacies

Price increasingly becomes a barrier to access the farther one travels outside Dar es Salaam. Weak monitoring of private pharmacies and less competition result in fewer options for clients. Unauthorized retailers carrying ARVs and retail pharmacies prescribing directly to patients were found during the assessment. Current prices for ARVs being sold in retail pharmacies visited are—

Dar es Salaam	
Generic:	33,000 Tsh/month
Branded:	up to 80,000 Tsh/month
Mwanza Region	
Generic:	55,000 Tsh–93,000 Tsh/month
Branded:	up to 290,000 Tsh/month

Conclusions and Recommendations

I. Logistics Management

The success of any health program depends on its capacity to ensure a reliable and uninterrupted supply of the commodities needed to support service provision and meet the needs of the people the program is intended to serve. As the Government of Tanzania works to integrate comprehensive HIV/AIDS prevention, care, and treatment services into all health programs, it is critical to support implementation of the integrated logistics system for essential health commodities to ensure availability of HIV/AIDS commodities at all levels of the public sector health care delivery system. The following recommendations for strengthening logistics management are offered to support expansion of PMTCT and eventual initiation of ART in Tanzania.

Immediate-Term Actions

Immediate actions to facilitate expansion of PMTCT services in the public sector and to ensure a reliable and uninterrupted supply of ARV drugs for initiation of PMTCT Plus and ART include—

1. Recognizing that some health facilities are at a higher stage of readiness than others to initiate PMTCT and ART in terms of personnel, services, and infrastructure, recommendations include the following:
 - Initiate PMTCT and ART services first at those facilities that are at a higher stage of readiness.
 - Focus efforts and allocate resources to build capacity at those facilities that require more attention for startup, concentrating on the areas of need identified in the individual site assessment reports.
2. Include clinical, counseling, nursing, pharmacy, and laboratory staff in PMTCT and ART training activities.
3. Consider public sector support in procurement and distribution of PMTCT and ART commodities for private providers, NGOs, FBOs, and employer-based programs that already provide PMTCT and ART, or are ready to initiate services but are constrained by unreliable sources of supply.
4. Integrate ordering and reporting of PMTCT commodity distribution and use within the *mini-indent* system currently being rolled out in 11 regions to manage STI program commodities. Many PMTCT-related commodities are already managed through the STI Program (HIV test kits, STI drugs, RPR syphilis reagents), and nevirapine tablets and syrup could easily be added at this point. Collaboration between the NACP and the PMTCT Secretariat to standardize the data collection, reporting, and ordering systems for these products could result in a single, integrated logistics system for managing STI and PMTCT commodities in the short term. The *mini-indent* system would ultimately be incorporated into the larger, integrated logistics system for public sector health commodities.
5. Develop and implement a pilot data collection, ordering, and inventory control system to introduce ARVs at selected sites.
6. Consider a vertical supply pipeline for ARVs with direct delivery from the central level to the health facilities that will provide PMTCT Plus and ART in the initial phase of scaleup. As services expand and the number of patients and volume of commodities increases over time, options for integrating management of the ARV supply with other HIV/AIDS products should be assessed.

7. Given the nature of ARVs, measures to ensure security in storage and transport and procedures for monitoring ARV use at facilities need to be established. In the immediate term, ARVs should be stored in a secure cage or reinforced storage room at MSD and kept in locked cabinets inside locked pharmacy storerooms at dispensing facilities. Procedures and safeguards for restricting access to the products/product storage areas should be established, disseminated, and adhered to.

Intermediate and Long-Term Actions

It is equally important to continue ongoing work to establish the MOH integrated logistics system for essential health commodities to manage the broad range of HIV/AIDS-related commodities required to support HIV prevention, care, and treatment services (United Republic of Tanzania MOH and DELIVER 2002). System-wide interventions to strengthen public sector logistics system capacity are required to ensure availability of the commodities needed to support expansion of PMTCT services and initiation of ART, including—

1. Implement the LMIS currently being developed for integrated management of HIV/AIDS commodities. The LMIS for collecting and reporting logistics data on stock on hand, quantities dispensed, and losses and adjustments needs to be implemented at all regional and district hospitals and at lower-level health facilities. Routine access to LMIS data is essential for monitoring and maintaining adequate stock levels throughout the supply pipeline and for decision making with regard to commodity procurement and distribution. LMIS data are also critical for preparing forecasts of future commodity requirements and should be used to help validate and adjust forecasts based on morbidity and service statistics data.
2. Implement standardized inventory management procedures for maintaining adequate storage conditions, managing stock according to FEFO, and correctly calculating order quantities of health commodities at all regional and district hospitals and lower-level health facilities.
3. Establish forecasting methodology and build capacity within the MOH for quantifying HIV/AIDS commodity requirements for the following categories of products currently managed across several vertical programs:
 - HIV tests for VCT, blood safety, clinical diagnosis, and sentinel surveillance
 - syphilis screening tests
 - other related diagnostic and laboratory supplies
 - STI drugs, including those in essential drug kits
 - condoms and contraceptives
 - ARVs for PMTCT Plus and ART.
4. Strengthen coordination of financial resources to procure PMTCT and ART commodities at national and facility levels.
5. Incorporate logistics management of health commodities into PMTCT and ART training activities.
6. Include clinical, counseling, nursing, pharmacy, and laboratory staff in PMTCT and ART training activities.

Logistics Management of Laboratory Reagents and Supplies

Special attention is required to improve logistics management of laboratory testing reagents and supplies to support PMTCT and ART. Specific requirements for selection, procurement, management, and use of HIV tests need to be considered (e.g., short shelf life, storage requirements, testing protocols, and training required). Again, because the logistics constraints on availability of laboratory products at health facilities are systemic in nature, system-wide interventions are required. Logistics management of HIV test kits, RPR syphilis tests, and other laboratory reagents and supplies required for PMTCT is included in the integrated LMIS and inventory control system being designed to support HIV/AIDS commodity management in Tanzania.

Forecasting, Procurement, Distribution, and Use of HIV Test Kits for Clinical Diagnosis

Use of HIV tests for clinical diagnosis has not been officially recognized, so HIV tests for clinical diagnosis are being taken from stocks for blood safety and VCT. Quantities of HIV tests used for clinical diagnosis are not reported as such, and estimates of HIV test kit requirements are increased to include additional test kits to account for clinical diagnosis. With the imminent arrival of ARVs, clinical diagnosis should be officially recognized as a use of HIV test kits, and procurement and distribution of test kits for this purpose must be planned, budgeted for, and forecasted at the national level, and HIV test use should be accurately recorded and reported at the facility level.

Need to Build Logistics Management Capacity within the MOH

Logistics management of PMTCT and ART commodities must be coordinated and integrated with the supply and management of all essential health commodities in ways that are feasible, efficient, and effective. This includes coordination of multiple sources of funding and sources of supply for commodity procurement at the national level; implementation of a standardized LMIS and inventory control system for all products; and building logistics management capacity to forecast commodity requirements and manage the in-country supply pipeline. It is critical to establish a logistics management coordinating mechanism or body within the MOH with sufficient authority and logistics management capacity to communicate with multiple donors and other government entities, and to coordinate the supply and management of PMTCT and ART commodities across several vertical programs.

Options to be explored include the National PMTCT Secretariat, the Pharmaceutical and Supplies Unit, or another entity to be created within the MOH structure to coordinate these logistics management functions across programs. Figure 4 depicts the central role of the proposed Logistics Support Team (LST), which currently does not exist within the MOH (indicated by the shaded box in the middle of diagram). The LST should be housed within the existing MOH structure.

Significant logistics management expertise needs to be built within the current PMTCT Secretariat membership (NACP, MSD, TFDA, and others) if, as has been suggested, the national PMTCT Secretariat is to assess program needs and coordinate commodity procurements and donations from various donation programs.

As another option, rather than creating a separate unit, the MOH has indicated that the logistics management coordinating function fits within the mandate of the Pharmaceuticals and Supplies Unit (PSU) of the MOH under the Pharmaceutical Sector Master Plan (1998–2002), which ended in 2002 but failed to meet its mandate during this time frame. Currently under consideration is elevating PSU within the organizational structure of MOH, with the addition of six to eight staff to take on the logistics management coordination role. Significant capacity building would be required as PSU currently only manages essential drugs and does not have the authority to communicate directly with donors and MOH program managers to coordinate

sources of financing, estimate commodity requirements for a broad range of HIV/AIDS commodities, or oversee procurement planning and monitoring of the supply pipeline in the country.

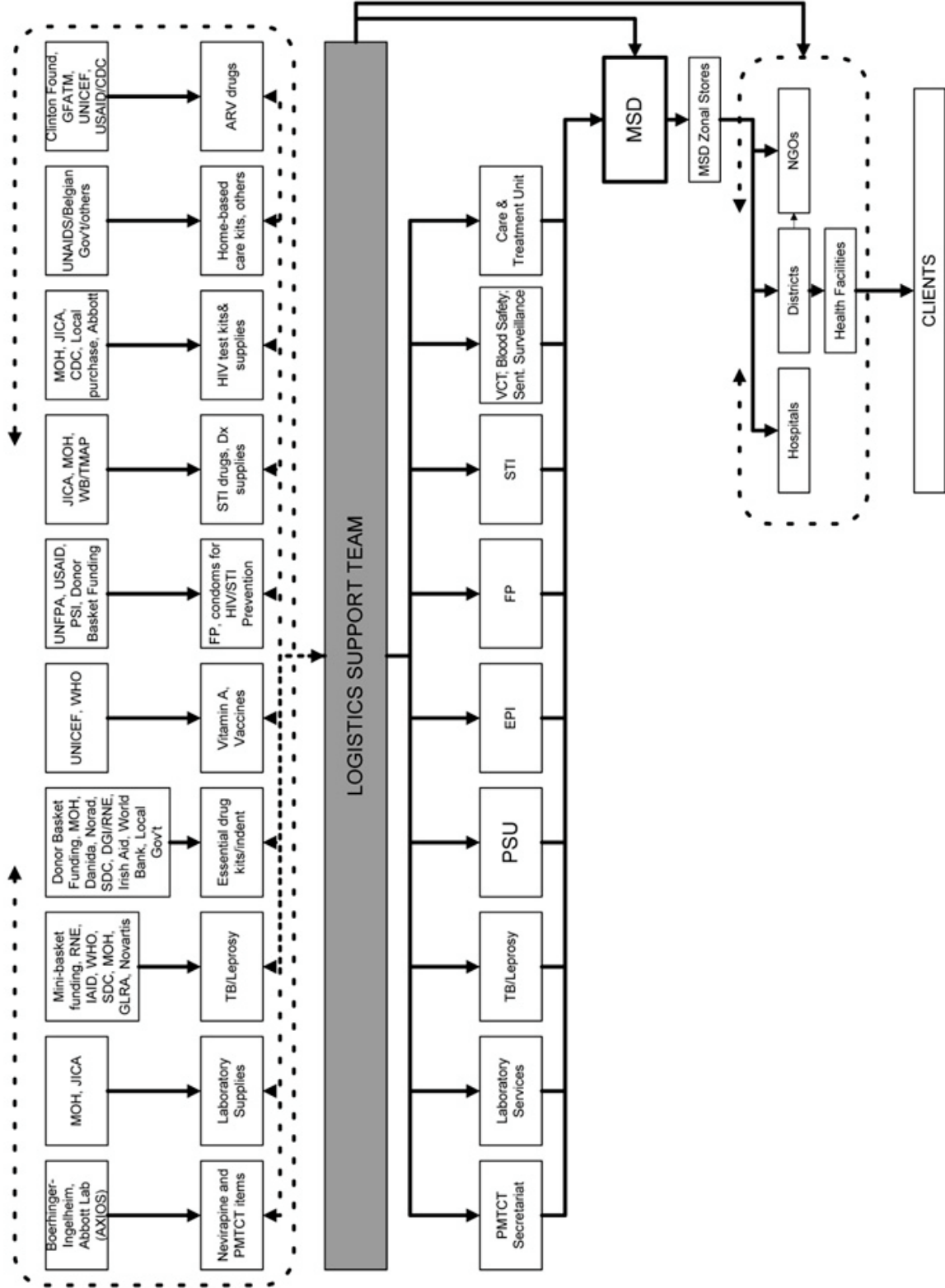
Whichever option is chosen, full-time attention over the medium- to long-term will be needed to—

1. Strengthen forecasting capacity for a broad range of commodity needs for PMTCT and ART services across vertical programs.
2. Coordinate multiple sources of funding for procurement.
3. Align procurement lead times and shipment delivery schedules of multiple suppliers in accordance with the storage, inventory management, and distribution capacity of the in-country supply pipeline.

The above logistics management functions must be supported by an LMIS to verify stock balances and commodity use of any given product by level and facility and nationwide. A critical task of the LST, therefore, is to support implementation of the LMIS for HIV/AIDS commodities in Tanzania.

It will be essential for the Government of Tanzania to support the development and maintenance of logistics management capacity within the MOH to be able to respond to the immediate need to expand PMTCT and ART services, as well as for longer-term sustainability of the integrated logistics system for essential health commodities. Commitment and investment of financial and human resources is required to maintain oversight, coordination, and management of the public sector logistics system.

Figure 4.
Proposed Logistics Support Team



II. Site Readiness to Initiate PMTCT and ART

Recognizing that some health facilities are at a higher stage of readiness than others to initiate PMTCT in terms of personnel, services and infrastructure, it is recommended to—

1. Initiate PMTCT services first at those facilities that are at a higher stage of readiness.
2. Focus efforts and allocate resources to build capacity at the facilities that require more attention for start up, concentrate on areas of need identified in the individual site reports of stage of readiness.
3. As part of VCT training activities, include VCT counselors at PMTCT sites in training for logistics management of HIV test kits.

III. Opportunities for Public/Private Sector Collaboration in PMTCT and ART

Opportunities for public/private sector collaboration that could be incorporated to enhance the Government of Tanzania's national response to HIV/AIDS and that would support private and voluntary sector provision of PMTCT and ART as a component of the national policy to expand PMTCT, include—

1. Sharing lessons learned and comparative advantages of private providers, NGOs, FBOs, and commercial sector pharmaceutical experts that already provide PMTCT and ART services and commodities in—
 - Joint curriculum development and training for public, private, and NGO/FBO providers in clinical, laboratory, counseling, pharmaceutical, and logistics management.
 - Development of reporting, monitoring, and evaluation systems, including a logistics management information system for managing commodities.
 - Development of quality assurance procedures and a supervision system for clinical and laboratory services and commodity management.
 - Establishing criteria, procedures, and a plan for site accreditation and ongoing inspection and quality monitoring measures to ensure access and quality of PMTCT and ART services.
 - Establishing criteria for patient selection for PMTCT and ART.
2. Consider public sector support for procurement and distribution of PMTCT and ART commodities to private providers, NGOs, FBOs, and employer-based programs that already provide PMTCT or are ready to initiate PMTCT, PMTCT Plus, or ART but are constrained by an unreliable sources of supply. NGOs, mission hospitals, and employer-based programs could take advantage of economies of scale by ordering and receiving ARVs, HIV test kits, and supplies for infection prevention through the MSD procurement and delivery system rather than placing individual orders and providing their own transport.
3. Recruitment and training of traditional birth attendants and involvement of private and retired public sector nurse/midwives currently practicing in their communities (through PRINMAT) could be tapped to improve access to PMTCT services and extend PMTCT to home-based settings.

Annex A
Assessment Tools

Central Level Questionnaires

(desk review and stakeholder interviews)

Purpose:

The purpose of this assessment is to determine the current service delivery and logistics system capacity and readiness to initiate and expand PMTCT and ART services and to manage the HIV/AIDS commodities needed. Assessment activities will be conducted at the national level and at current and proposed PMTCT and ART sites to with the following objectives:

- To identify strengths and limitations of the current MOH logistics systems for procurement, storage, and distribution of ARV drugs for PMTCT and ART, drugs for the treatment of OIs and STIs, contraceptives, condoms, HIV tests, and other laboratory reagents and supplies
- To identify and document the current readiness in terms of personnel and infrastructure to introduce and expand PMTCT and ART in selected sites
- To identify the MOH policies and procedures needed to support PMTCT and ART service delivery and enhance logistics management of commodities required to implement these programs
- To identify the critical issues in the systems, policies and financing that may facilitate or hinder commodity security (future product availability)

Methodology:

The central level questionnaire is to be used for interviewing stakeholders (policy makers and implementers) at the national level (government, donor agencies, private sector, NGO, FBO, special initiatives) to gather and document information, experience and guidance on the policies and practices that affect implementation of PMTCT and ART services and availability of the HIV/AIDS commodities needed.

The facility level questionnaires are designed to capture information on current capacity and readiness at current and proposed PMTCT and ART sites including infrastructure, personnel and the commodity supply system to support clinical, laboratory, pharmacy, counseling, community and home based care services.

The interview questions are based on previous JSI/DELIVER work in Tanzania and a review of HIV/AIDS policy and planning documents, technical reports, assessments and evaluations of PMTCT services, HIV/AIDS treatment and care guidelines, and plans for initiation of ART.

I. General questions for stakeholders

Interviewee Name: _____ Title: _____

Name: _____ Title: _____

Interviewer Name: _____ Title: _____

Name: _____ Title: _____

1. What areas does your organization support to address HIV/AIDS in Tanzania?
 - a. policy development
 - b. program management
 - c. human resource development (e.g., staff hiring, training, supervision)
 - d. drug procurement
 - e. other _____
2. Is your organization's support limited to funding of these activities or does it include technical assistance? Please describe.
4. What is the scope of the technical assistance? National, selected regions, districts or specific health programs?
5. Which sectors/organizations are the recipients of this support?
 - a. public sector
 - b. private sector
 - c. NGOs
 - d. FBOs
 - e. Other _____
6. What is the planned timeline/duration of this support?
7. What challenges have you experienced in implementation of your organization's support to address HIV/AIDS in Tanzania?
8. Do you have a map or diagram of how your inputs and programs relate to those of other stakeholders?

[DELIVER team to prepare a map of stakeholders and stakeholder inputs (financial, human resources, commodity procurement) for initiation and expansion of PMTCT and ART. E.g., *Médecins du Monde* (MDM) France and GTZ Mbeya have provided/will continue to provide funding, equipment, commodities, staff training and salaries for two of the original 5 PMTCT pilot sites.]

II. Policy

Desk Review: Government and MOH stakeholders to be interviewed

1. What is the HIV/AIDS policy? Does it formally link to other social sector policies?
 - Does the HIV/AIDS policy explicitly mention securing adequate supplies of condoms, test kits, ARVs, drugs for treatment of OIs, etc.?
 - To what extent are policies and programs implemented?
 - Who is responsible for the HIV/AIDS policy?
 - How does it relate to the Poverty Reduction Strategy Paper (PRSP)?
2. How will policy decisions that govern the PMTCT program be made? for the ART program? (Discuss role of PMTCT steering committee?, PMTCT technical committee? Care and Drugs Access task force?)
3. What are the major policy decisions that need to be addressed to initiate and expand PMTCT? to initiate ART? (chief medical officer [CMO], HSSP, NACP, Diagnostics Section)
4. What are the major policy decisions that relate to logistics management that need to be addressed (at sites and at national level) to initiate and expand ART? to expand PMTCT to 21 regions over the next 3 years? (CMO, MSD, NACP, Diagnostics Section, PMTCT needs assessment/evaluation)
5. What coordination mechanisms exist for multi-sectoral response to HIV/AIDS?
 - Who is responsible for coordinating HIV/AIDS activities between sectors?
 - How are HIV/AIDS activities coordinated between levels: central, district and community?
 - How are the various donor initiatives coordinated? UNICEF/CDC PMTCT, President's Initiative, Global Fund Activities, Clinton Foundation, GTZ, TMAP, etc.
 - How are public, NGO and private sector activities coordinated?
 - How are related health services coordinated? HIV/AIDS, STI, TB, family planning, ante-natal care and delivery?
 - How will the health commodities supply chain need to be designed/implemented to respond to these services? Are the ongoing technical assistance activities implemented by DELIVER to develop an integrated pull system for all public sector health commodities sufficient to respond to the needs of the PMTCT program expansion and initiation of ART?
 - Is the military health infrastructure going to participate in PMTCT? What is their relation to the public sector (MSD) supply chain expected to be?
 - Will the military handle their own ARV logistics? What will be their relationship to the public health sector stakeholders involved in logistics management of health commodities including ARVs?
6. How does decentralization impact on HIV/AIDS programs in general and PMTCT and ART in particular?
 - decision making
 - funding of services and commodities? (current and planned)

- procurement regulations
 - reporting and communication between levels
 - service provision
 - commodity management (current and planned).
7. How does increasing HIV/AIDS focus favorably or negatively impact other programs (at the government level? at the donor level?)
- Does it supplement or divert funding for family planning? TB? Other programs/services?
 - Does it add or drain skilled human resources for other health programs? Clinical, managerial? Logistics?
 - Does it strain or strengthen existing logistics systems?
8. What policies affect the private sector's provision of HIV/AIDS services? Do they differ between the non-profit and commercial/for profit providers?
- What regulations exist for provision of services/ licensing?
 - What oversight does the government provide?
 - How active is the government in promoting/supporting private sector provision of services?
 - Does the private sector have access to commodities procured through the public sector? If so, how?
 - What pricing controls exist for provision of health commodities in the private sector?
 - Are there other operational policies or regulations that adversely or positively affect the private sector?
9. Within the context of decentralization, how will the influx of HIV funds to DHMTs for implementation in the districts be managed? (HSSP, MOF)
- What is/are the mechanism(s)/the people/financial accounting procedures for managing and disbursing these funds?
 - How will non-governmental providers access/receive HIV funds? (NGOs provide 40% of health services in Tanzania)
10. What are the regulations or operational policies that affect delivery of HIV/AIDS services in the public sector? (HSSP, PSU, Civil Service Reform, Nursing Council, Chief of Nursing, Directorate of Human Resource Development)
- What are the licensing requirements or dispensing regulations?
 - What are the limitations on service provision by specific cadres or health professionals (lab, counseling, nurses, TBAs, physicians, pharmacists)?
 - What are the regulations or policies regarding rules for hiring, firing, transferring staff, job descriptions, professional development, remuneration, advancement, supervision and training?

III. Financing

(Desk review; MOF, MOH Chief Medical Officer, Diagnostic Services Unit, PSU, NACP, Drug Access/Care committee members, DPP and others)

1. How are the HIV/AIDS activities financed?
 - What are the sources of support and what percentage of funds do they provide?
 - Government, donor, households, private employers/insurance?
 - What was the most recent amount spent by the government on HIV/AIDS services? Recent trends in spending? Was funding through SWAp, budget line, other?
 - Are funds specifically allocated for HIV/AIDS commodities? What mechanisms are in place for ensuring lowest available price for commodities?
 - Are funds specifically allocated for supply logistics?
 - Is there a plan to reduce donor or government subsidies?
 - What is the role of community-based financing?
 - What is the funding balance between prevention, care and support and treatment? What are the proposed changes in this balance?
2. What are the pricing policies for HIV related illnesses specifically services for VCT, PMTCT and ART?
 - What is the expected cost of treatment (ART) per month? Lab monitoring?
 - Are any cost-recovery options for services and cost of medicines going to be implemented as part of the planned ART program in the immediate-, near-, long-term?
 - Will HIV-related illnesses be included in the list of diseases that are exempt from paying for services? For medicines, including for OIS and ARVs? For diagnosis and monitoring laboratory tests? How will exemptions be monitored?
 - If subsidized where will that be defined? In the national health insurance scheme? Separate or integrated in the benefit package?
 - What part of the cost for ART do the MOH and the MOF plan to cover with GOT funds?
 - What is the level of external resources that external stakeholders and committed so far (and plan to commit) to support the cost of commodities for VCT, PMTCT, and ART? (Donors: Global Fund, USAID, CDC, CA's, multi-lateral/bilateral loans, Clinton Foundation, pharmaceutical company donations such as the Diflucan Partnership/ Boehringer Ingelheim nevirapine (NVP) and Abbot Determine test kit donation programs, etc.) {INCLUDE IN MAP of stakeholder inputs}
 - How are multiple sources of funding for similar commodities going to be coordinated to maximize use of available resources?
 - What are the long-term sustainability issues with external financing commitments that relate to commodity security of ARVs for PMTCT and for ART? For other commodities required to run these 2 programs?

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- What agreements have been made with pharmaceutical manufacturers through the Accelerated Access Initiative?
 - Are pricing policies among suppliers supportive, neutral, or not supportive toward encouraging competition from private and social marketing providers?
 - Are pricing policies among suppliers sustainable in terms of covering reasonable costs?
3. Who will have final decision-making power regarding the budget for the PMTCT program? The ART program?

IV. Program Management

Desk Review:

Stakeholders: MOH programs; VCT, PMTCT, RCH/MCH, TB, STI, and ART. Donors who support PMTCT, and potentially ART

Public Sector: PMTCT Ipuge, Ramadani, RCHS Sanga, Directorate of Human Resource Development, Nursing Services Unit or others responsible for implementation of PMTCT at ANC clinics. NACP Dr. Swai, STI Dr. Nyanganyi (ask about syphilis screening and availability of RPR, STI dx and treatment services), VCT Ms. Msumi, members of Drug and Care Access Task Force, TB Dr. Egwaga (ask about integration of HIV& TB services, effect on demand for services and supply of TB drugs for HIV pts), OI Diagnosis and Treatment.

Stakeholders at site visits: RHMT, DHMTs, local PMTCT site coordinators

Private sector: NGOs, FBOs, employer based organizations already providing PMTCT/ART or planning initiation of PMTCT/ART. Donors that are/will be supporting PMTCT (CDC, USAID, GTZ, MDM, JICA, WHO, UNICEF, Basket Fund, others)

A. PMTCT Services

Desk Review: Concept Paper for Expansion of PMTCT to 21 Regions by June 2006.

Stakeholder Interviews: Ipuge/Ramadani, Mtenga (TFDA), RCHS, Dept Budget & Planning (HMIS), PSU, MSD, DHS. Ask about current status and functioning of the PMTCT Secretariat, National PMTCT Steering Committee, National PMTCT Technical Committee. Ask about membership, terms of reference, work to date. Ask each stakeholder about their role/responsibilities on these committees.

1. Who will be responsible for managing the PMTCT program at the national level?
 - at regional level?
 - at district level?
 - at site level?
 - at community level?
2. What is current management capacity for PMTCT at the national level?
 - at regional levels?
 - at district level?
 - at site level?
 - at community level?
3. What is/will be role of the Diagnostics Unit for PMTCT?
4. What is/will be role of RCHS for PMTCT? How do these two MOH entities coordinate?
5. How are PMTCT services integrated or coordinated with other MOH units/programs/services, e.g., NACP? STI program? VCT program? TB program?

Family Planning? OI diagnosis and treatment?

6. How does MOH coordinate PMTCT program management and service provision with other stakeholders (donors, AXIOS, NGOs, e.g., MDM, GTZ)
7. How are sites accredited for provision of PMTCT services? What is the process? What criteria/standards have been established for a site to be approved to initiate PMTCT services?
 - What are criteria re: number, cadre and qualifications of staff, capacity for lab/clinical/pharmacy/counseling services, reliability of drug supply, community linkages to support PMTCT, distance/accessibility for patients (for treatment and/or for referral)
 - Must selected PMTCT sites necessarily be already functioning ANC clinics?
8. What are the biggest management challenges?

B. ART Services

Desk Review: MOH policy documents; [World Bank MAP document, GFATM proposals, TACAIDS National Multi-Sectoral Strategic Framework on HIV/AIDS 2003-2007, MOH Second Health Sector Strategic Plan HSSP July 2003 – June 2008, Clinton Business Plan for HIV/AIDS Care and Treatment Plan]

Stakeholder Interviews: Members of Care and Drugs Access Task Force, NACP (VCT, STI, HIV testing), MSD, Diagnostics Unit, TFDA, RCHS, Dept Budget & Planning (HMIS), PSU, MSD, DHS, TFDA, private providers, donors. Ask about membership, terms of reference, work to date. Ask each stakeholder about their role/responsibilities on the Task Force, their roles in implementation of ART services. Private for-profit providers, traditional healers.

1. What is role of NACP for ART in the country? (Who will be responsible for policy and technical guidance re: STGs, service provision, human resource capacity building? What is role of NACP in implementation of ART services?)
2. Who will be responsible for managing the ART program? Who has the leadership for coordination and management of ART in the country? Is there a designated ART Coordinator/Manager at NACP?
3. What is the role of the Drug and Care Access Committee/Task Force?
4. What is role of other stakeholders in planning and implementation of ART in the country? (Donors, TACAIDS, AXIOS, PLWHAs, NGOs, voluntary/mission sector, pvt sector, FBOs, others)?
 - How does/will the MOH coordinate stakeholder resources and involvement in ART program management and service provision?
5. What is current management capacity for ART at the national level? (if known)
 - at regional level?
 - at district level?
 - at site level?
 - at community level?

6. How will sites be accredited for provision of ART services? What criteria/standards have been established for a site to be approved to initiate ART services?
 - Are current and proposed ART sites necessarily already PMTCT sites?
 - What are criteria re: number, cadre and qualifications of staff, capacity for lab/clinical/pharmacy/counseling services, reliability of drug supply, linkages with community to support ART, distance/accessibility of site for patients (for treatment, and/or for referral).
7. How are/will ART services be coordinated with other MOH units/programs/services? E.g. PMTCT (Diagnostics Unit, RCHS), RCHS (MCH and FP services), STI Pgm? VCT pgm? TB? Diagnosis and treatment of OIs?
 - What are the biggest management challenges?

V. Service Delivery

Desk Review: Most recent drafts of PMTCT Guidelines, are there updated National

Guidelines for HIV/AIDS or ART?? (the MOH Guidelines for Clinical Mgmt of HIV/AIDS from 2001 do not address how ART will be implemented, i.e. the service delivery model, standards for number, cadre and qualifications of staff to provide HIV care and treatment, laboratory services etc)

Stakeholders: MOH programs; VCT, PMTCT, RCH/MCH, TB, STI, and ART

Public Sector: Diagnostics Section, Ipuge, Ramahdani, RCHS Dr. Sanga, MCH providers, STI Dr. Nyanganyi (ask about syphilis screening and availability of RPR, other STI dx and treatment services), VCT Ms. Msumi, members of Drug and Care Access Task Force, TB Dr. Egwaga (ask about integration of HIV& TB services, effect on demand for services and supply of TB drugs for HIV pts), OI Diagnosis and Treatment.

Stakeholders at current or proposed ART sites. RHMT, DHMTs, local ART site coordinators

Private sector: NGOs, FBOs, employer based organizations already providing PMTCT/ART or planning initiation of PMTCT/ART.

A. PMTCT Services

1. What are components of PMTCT services that must be in place at a designated site?
 - Confirm list of minimum package of PMTCT services:
 - Voluntary HIV counseling and testing (on site? by referral?)
 - Adults; ELISA and rapid assay tests
 - Infants; ELISA testing at 15 and 18 months.
 - Universal syphilis screening (who will run tests? ANC staff auxilliary nurses, midwives? Lab techs?)
 - On site or referral for confirmatory testing of seropositive syphilis screening results (VDRL, TPHA, TPPA)
 - Treatment of pregnant women with syphilis (benzathine penicillin injection)
 - Partner notification and treatment
 - Routine laboratory services including blood type, Rh factor, and CBC (complete blood count) including hemoglobin.
 - Routine nutrition and infant feeding counseling in ANC clinics expanded to include BF and nutritional counseling for HIV+ pregnant women
 - Obstetric services
 - Family planning
 - Pre-delivery ARV prophylaxis for PMTCT for mother and post-delivery ARV prophylaxis for Infant (which ARV drug regimen being used?)
 - Co-trimoxazole prophylaxis to prevent pneumonia for infants
 - Child Immunizations (list the vaccines; polio, DPT/HB, measles, BCG)
 - Referral system for diagnosis and treatment of STIs (other than syphilis)

- Home Based Care (what does this consist of for PMTCT?)
 - Community involvement/support for PMTCT? (what does this consist of?)
 - Universal Safety Precautions for HCWs (practiced on site?)
 - Prevention of nosocomial infections?
2. What is current status of national PMTCT guidelines? (to be finalized in September 2003a). Request copy of latest version of PMTCT guidelines.
- Technical question from PMTCT draft guidelines pg 63-64 under section on Baseline Laboratory Evaluation for PMTCT. Are CD4 and other lab tests required/recommended for PMTCT?
3. How many sites are currently providing these PMTCT services?
Public Sector: [Desk review, confirm in stakeholder interviews]
- Private Sector: stakeholder interviews (employer based, pvt clinics, NGOs, voluntary etc)
4. How many women have received ARV prophylaxis for PMTCT to date?
Public Sector: [Desk review, confirm in stakeholder interviews]
- Private Sector: stakeholder interviews (employer based, pvt clinics, NGOs, voluntary etc)
5. How many infants have received ARV prophylaxis for PMTCT to date?
Public Sector: [Desk review, confirm in stakeholder interviews]
- Private Sector: stakeholder interviews (employer based, pvt clinics, NGOs, voluntary etc)
6. Under current plans for program expansion, how many new sites will initiate PMTCT services? Is it expected that these sites will provide the full range of PMTCT services listed above? (Which services will be provided on site? Which services will be referred?)
7. What are the current or proposed model(s) of care for PMTCT? and what are the linkages between these?
- Community based model of care in rural setting/mobile unit
 - Community based health clinic in urban setting
 - Protocol driven model (integrated into existing services e.g., TB, MCH/ANC, or PMTCT expanded to other HIV/AIDS treatment and care services – STI, OI, FP)
 - Specialty HIV care site (e.g., research or referral hospital)
 - Others
8. Do current policies assure the capacity of PMTCT service providers? e.g., training requirements and supervision for quality assurance?
- Are there service delivery guidelines, protocols, norms, and standards? For laboratory services, VCT, PMTCT, PEP, HIV/AIDS treatment, care and support?
 - What pre-service, OJT, refresher, update training is provided (clinical, laboratory, counseling, home-based care)?
 - Are there regulations or policies on client records, referral systems, clients rights etc?

- How is client satisfaction monitored?
- How is client compliance monitored? (for PMTCT, single dose for infant off site? Cotrimoxazole prophylaxis? Nutritional counseling/milk substitutes for BF?)

B. National VCT Program and HIV testing at PMTCT sites

Desk Review:

Stakeholders: Public Sector; NACP, VCT Program Ms. Msumi, PMTCT Ipuge, Ramadani, RCHS Sanga, others? Donors who support HIV testing (JICA, UNAIDS, WHO, others?)

Private Sector: NGOs, (AMREF), voluntary/mission hospitals, FBOs, employer based organizations that offer VCT.

1. What is the current capacity for HIV testing? (How many sites exist nationally? How many people are accessing VCT? How many receive counseling? How many are actually tested and receive results?)
2. Where are VCT services being provided? (referral, regional, district hospitals, health center level? ANC clinics, stand alone VCT sites, within employer based health services? Private clinics, voluntary/mission hospitals, military facilities, mobile units?)
3. Who is responsible for managing VCT services at the facilities? Who conducts the counseling? Who conducts the HIV tests at the site?
4. What VCT service guidelines and HIV testing protocols exist for performance and interpretation of HIV testing at the national level? (write name and date of most recent documents, obtain copies if possible).
 - Are there any revisions currently underway or planned? When? What are the aspects VCT are to be addressed, revised, expanded in the revision?
5. Are same day HIV test results provided at all sites? or are clients referred to another site or are samples sent to another site for confirmatory testing of initially positive results?
6. What is the current capacity and type of counselors (nurses, social workers, lay counselors/PLWH/A) for VCT?
7. What is the projected need for the future for counselors? (Minimum number of counselors per site with respect to the workload: what is the expected number of clients that a counselor can counsel per day? Are these full-time or part-time counselors? In which setting?)
8. What are the plans for expansion?
 - For obtaining and training VCT counselors and lab techs?
 - Expansion based on regions, types of sites, rural/urban, emphasis on expansion of VCT at MTCT sites?
9. How are/will VCT services be linked to other HIV prevention, care and treatment services? e.g., condom distribution, PMTCT, FP, diagnosis and treatment of TB, STIs, OIs, ART, psychosocial support?
10. How are VCT services coordinated between public and private sectors?
11. What technologies are utilized? List the different types of HIV tests and how they are used at different levels of the health system and at different types of VCT sites. (ELISA, rapid tests, which rapid tests have

been approved/registered/are available in country and in use at VCT sites? Which HIV tests used for initial screening, confirmatory? Are clients referred to another level/site for confirmatory testing?)

12. What are the sources of supply for HIV tests for VCT? Are there different sources for VCT at PMTCT sites vs other VCT testing sites?

C. Post Exposure Prophylaxis (PEP)

1. What is national policy for occupational PEP for health care workers? for victims of sexual violence? Are written national guidelines available? From what date? Being developed, revised or updated? (ask for copy)
2. How many sites are currently able to provide PEP to health care workers? To victims of sexual violence?
3. How many people have been treated with ARV drugs for PEP to date?
4. What are the challenges in providing PEP? (staff training, availability of ARV drugs, stigma/discrimination, others)

D. ART Services

1. What are the components of ART services that must be in place at a designated site?
Confirm list of ART services package.

What is current policy? Should all minimum package PMTCT services be available at existing and proposed ART sites? If so, add the list of PMTCT Services from pg. 1 under V. Service Delivery, A. PMTCT Services to the following list of ART services.

VCT Voluntary HIV Counseling and Testing

Routine laboratory testing

- CBC
- hemoglobin
- T lymphocyte count
- Others, (see list of laboratory services)

Specialized HIV laboratory diagnostics where available;

- CD4 cell count, viral load (VL)
- PCR, p24 antigen

Diagnosis and treatment of STIs (on site or proven referral mechanism)

- laboratory diagnosis and syndromic management of STIs
- syphilis screening and treatment of symptomatic patients and partners

Diagnosis and treatment of OIs (on site or proven referral mechanism)

Diagnosis and treatment of TB (on site or proven referral mechanism)

Family Planning (on site or proven referral mechanism)

Condom distribution

Nutritional counseling and supplementation

Psychosocial support

Adherence counseling

Universal Safety Precautions for health care workers

2. How many sites are currently providing these ART services?

Public Sector: [Desk review, confirm in stakeholder interviews]

- Private Sector: stakeholder interviews (employer based, pvt clinics, NGOs, voluntary/religious sector)

3. How many people have received ARV treatment for ART to date? Adults? Children?

Public Sector: [Desk review, confirm in stakeholder interviews]

- Private Sector: stakeholder interviews (employer based, pvt clinics, NGOs, voluntary etc.)

4. Under current plans for program expansion, how many new sites will initiate ART services? Is it expected that these sites will provide the full range of ART services listed above? (Which services will be provided on site? Which services will be referred?)

Public Sector: [Desk review, confirm in stakeholder interviews]

Private Sector: stakeholder interviews (employer based, pvt clinics, NGOs, voluntary etc)

5. What are the current or proposed model(s) of care for ART? And what are the linkages between these?

- Community based model of care in rural setting/mobile units
- Community based health clinic in urban setting
- Protocol driven model (integrated into existing services e.g., TB, MCH/ANC clinics or PMTCT expanded to include other HIV/AIDS care and treatment services - STI, OI, FP)

6. What national service delivery guidelines, protocols, norms or standards are in use or under development for ART ?

[Have the 2001 “MOH Guidelines for the Clinical Management of HIV/AIDS” written by MUCHS, MNH, NACP been updated?]

Public Sector: (include clinical trials, pilot projects, and national ART program)

Private Sector: (NGOs, FBOs, voluntary organizations, employer based programs, private providers)

7. Do current policies/national guidelines ensure the capacity of ART service providers and quality of care? e.g., training requirements and supportive supervision? [Desk Review and Stakeholder Interviews]

- Do guidelines include laboratory services, VCT, PEP, HIV/AIDS treatment, care and support including diagnosis and treatment of OIs, TB and STIs ?

- Do guidelines include patient eligibility criteria, ARV treatment regimens, monitoring of patient response to treatment, quality assurance?
 - What pre-service, OJT, refresher, update training is provided (clinical, laboratory, counseling, home-based care)?
 - Are there regulations or policies on client records, referral systems, clients rights etc?
 - How is client satisfaction monitored?
 - How is client compliance monitored? (for adherence to ARV treatment regimens)
8. What is the list of drugs for first line, second line, alternate treatment regimens etc? Will this be a closed formulary? Will generic and/or branded ARV drugs be used?

Public Sector:

Private Sector:

9. What is the past experience with ARVs in Tanzania?

Public Sector:

Private Sector:

10. What is the current use of ARV's in Tanzania?

Public Sector:

Private Sector:

11. What has been the experience in terms of toxicities/side effects, adherence and how has this been managed?

Public Sector: (from clinical trials, research/pilot projects,)

Private Sector: (from experience with ART patients)

12. What are the latest plans for start-up and expansion of national ART program? (ask for documents)

- National Guidelines for ART
- Training materials and training clinicians
- IEC, patient information and education
- Procurement and Distribution
- Budgetary Requirements
- Management and coordination

13. What are guidance/plans for monitoring patient and national level of efficacy, toxicities and resistance?

14. How will treatment failure be defined and managed?

15. Are there any current activities or future plans for monitoring viral resistance at ART sites?
16. What requirements, if any, are there for sites to be qualified to prescribe and dispense ARV drugs?

E. Community Involvement

1. What are current efforts and future plans for community involvement and mobilization to
 - To support enrollment and follow up of PMTCT for HIV+ women and children?
 - Regarding role/involvement of traditional birth attendants in PMTCT?
 - To support appropriate use of ARV drugs and patient adherence?
2. Ask for specific examples and descriptions

F. Adherence support and patient education

1. What are national policies/plans for adherence support, role of DOT and patient education?
2. What are the human and other resource capacity currently and future needs/plans for expansion of adherence support and patient education services?

G. Research

1. What clinical research has been conducted or is ongoing in Tanzania on use of antiretroviral drugs? for PMTCT? for ART?
 - from PMTCT Assessment and Planning Template, October 2002
 - MUCHS and Harvard University
 - Research proposal submitted to Columbia University/Rockerfeller, MTCT Plus project
 - MITRA: TanSwed HIV collaboration
 - Kesho Bora: WHO research project at KCMC
 - GTZ in Mbeya
2. What operations research has been conducted or is ongoing in Tanzania on implementation of PMTCT services? Implementation of ART services?
3. Who have been/are the are the key stakeholders/partners in these research efforts? (external, national; financial; technical) e.g., CDC, other donors, research foundations (e.g., Gates, EGPAF, others) (from PMTCT Assessment and Planning Template, October 2002)
 - MUCHS and Harvard University
 - Research proposal submitted to Columbia University/Rockerfeller, MTCT Plus project
 - MITRA: TanSwed HIV collaboration
 - Kesho Bora: WHO research project at KCMC
 - GTZ in Mbeya

VI. Human Resources

Desk Review (PMTCT Assessment, Clinton Business Plan, etc.)

Capacity and Training of HCWs:

1. What are the national requirements for providers (private or public sector) to be able to prescribe ARVs?
2. What are the national requirements for pharmacists (private or public sector) to be able to manage/dispense/sell ARVs?
3. What are national training plans and resources/partners that may be opportunities for integrating logistics management training?
 - In-service
 - Pre-service (nursing, medical, pharmacy, lab schools etc.)
4. What are established standards for number and cadre of staff at each facility? for PMTCT? for ART?
5. What human resources are available, to be trained, and needed to be hired? MDs, nurses, counselors, lab techs, pharmacists etc.

VII. Public and Private Sector Provision of HIV/AIDS Services

1. What are the regulations or operational policies that affect delivery of HIV/AIDS services in the public sector?
 - What are licensing requirements or dispensing regulations? How restrictive are they?
 - What are the limitations on service provision by specific cadres of health professionals?

2. What are the regulations or policies regarding rules for hiring, firing, transferring staff, job descriptions, professional development, supervision, and training, etc.? What policies affect the private sector's provision of HIV/AIDS services? Do they differ between the non-profit and commercial providers?
 - What regulations exist for provision of services/licensing?
 - What oversight does the government provide?
 - How active is the government in promoting/supporting private sector provision of services?
 - Does the private sector have access to commodities procured through the public sector? Are there price controls?
 - Are there other operational policies or regulations that adversely or positively affect the private sector?

[See also "Private Sector Provider Questionnaire"]

VIII. Logistics Management of HIV/AIDS Commodities

List of PMTCT Commodities

Minimum, essential package of drugs, vaccines, laboratory reagents, and consumable supplies required to support PMTCT at a designated site:

Complete the list of commodities required for PMTCT services: [must be in full supply at current and proposed PMTCT sites, i.e. ANC clinics managed through RCHS]

- ARV drugs (Nevirapine 200mg tablets (mother), Nevirapine syrup (Infant))
- Cotrimoxazole syrup for infant prophylaxis (correct dosage form and strength?)
- Child immunizations; tetanus vaccine, DPT/HB, measles, BCG, others?
- Malaria prophylaxis/treatment (S.P.)
- Multivitamin supplements
- iron supplementation (tablets? dose)
- folic acid supplementation (tablets? Dose?)
- milk substitutes, cow's milk
- HIV test kits (ELISA and rapid assay) and consumable laboratory supplies needed
- RPR (rapid plasma reagin) for syphilis screening
- contraceptives
- condoms
- Equipment and supplies for universal safety precautions and HCW /patient safety
 - sterilizing equipment or disinfectants
 - disposable syringes and needles
 - protective gear (disposable gloves, masks, glasses, gowns, booties, mackintoshes, Sharps disposal boxes (locally made)
 - Bio-hazard bags
 - incinerator
- laboratory equipment and supplies (microscope and slides, consumables)
- clean beds, sheets and delivery tables
- washing machine

List of ART Commodities

List the essential package of drugs in Tanzania, (ARVs, STI, OI, TB) contraceptives, condoms, nutritional supplements), laboratory reagents and consumable medical supplies required to support ART at a designated site.

A. Product Selection

Desk Review: Standard Treatment Guidelines/ARV Treatment Regimens for PMTCT and ART, NEDL, list of registered ARVs, STI prgm and TB prgm STGs and drugs, donated HIV/AIDS commodities (STI drugs, HIV test kits, Diflucan, NVP, others?)

Stakeholder Interviews:

Public Sector

Private Sector

1. Which HIV/AIDS commodities are on the national essential drug list (NEDL)? contraceptives, Nevirapine, other ARVs? Generic or patented ARVs? OI drugs? HIV test kits and other diagnostic agents?
 - How are products selected?
 - What is the process of adding new commodities to the list? How long does it take?
 - Are there different processes for donated products? E.g. contraceptives, STI drugs
 - For products procured with government funding?
 - For products procured with external funding?
2. What products are currently provided through a donation program? E.g. Axios. AAI

B. Product Registration and Quality Control

Desk Review: List of registered ARV drugs and laboratory reagents

Stakeholder Interviews: TFDA, PSU, Customs

1. How are drugs/commodities registered? Laboratory reagents
 - Who is responsible for registering new products?
 - What is the process?
 - How long does it take?
 - Are there different processes for donated products?
 - What product quality controls exist? For incoming batches and post-market surveillance?
 - Are they enforced? How?
 - What is registration process and quality control procedures for laboratory reagents?
2. What policies exist to regulate/ensure product quality?

3. What quality control procedures are in place or being planned for ARV drugs? (e.g., use of pre-qualified suppliers, submission of dossier/documentation of quality control testing, certificates of analysis, amount of shelf life remaining when product received in country)

C. Forecasting

Forecasting of OI, STI, and ARV drug requirements for PMTCT, PEP, ART? HIV test requirements for VCT, PMTCT, and other uses (clinical diagnosis, blood safety), and other laboratory reagents?

1. Who is/will be responsible for preparing the forecasts of ARV drug requirements for the PMTCT program? For the ART program?
2. How are forecasts of ARV drug requirements currently developed for the PMTCT program? ART program?
 - How often are forecasts prepared?
 - What data is used?
 - What methodology is used?
 - How long are the forecasts prepared for? (annual, multi-year?)
3. How will forecasts for—
 - OI medications and ARV drugs be adjusted to account for program expansion?
 - How will forecasts be adjusted for changes in ARV treatment regimens due to toxicity and drug resistance?
4. What is the current procedure for submitting commodity forecasts and requests for donor procurement? Will the same procedure be followed for OI medication and ARV drugs? If not, how will it be different? (Interviewer to verify procedures re: review/approval and timing of submission of forecasts and request)
5. How are forecasts linked to resource mobilization? (government budget, pooled funding, donor funding)
6. Is there a commitment by donors or the government to ensure full supply of commodities needed to support PMTCT? ART?
7. How are forecasts reconciled?
8. What has been experience to date with donation programs in supplying commodity needs? Has full supply been achieved? For which commodities?

D. Financing for Commodity Procurement

(MOF, DPP, DFID, basket funding, GFATM, WB and others)

1. What are current government and donor commitments to fund procurement of PMTCT commodities? To fund ARV drugs? (e.g MTEF, pooled funding, donor procured)
2. What are the mechanisms/procedures and timeframe for obtaining/ensuring funding for procurement of PMTCT commodities? ARV drugs for ART?

E. Procurement Planning/Shipment Delivery Schedules

Desk Review:

Stakeholder Interviews: MOF, MSD, PSU, TFDA, donors (UNICEF, JICA, EU, AXIOS, AAI, others).

1. What are the procurement regulations?
 - What is the policy on importing generic vs. patented drugs? Compliance with TRIPS?
 - Are there taxes and duties (excise, import, value-added tax, exemptions) that affect importation of HIV/AIDS commodities?
 - Do these differ between public and private sector?
 - How extensive are the approval processes? Procurement limits?
 - How are tenders let? Bids reviewed? Pre-qualification of suppliers?
 - What are customs clearance procedures and timeline?
2. What is the potential of local manufacturing?
 - What HIV/AIDS commodities/drugs are currently manufactured locally?
 - What is availability and quality of locally manufactured drugs?
 - Are there plans for expanding local production? If so, describe them.
3. Which products are procured under the Accelerated Access to Drugs Initiative?
4. Are all OI medications and ARV drugs on the National Essential Drugs List?
5. Are all OI medications and ARV drugs registered for use in the country by the National Drug Regulatory Authority?
6. Who is/will be responsible for procurement planning, ordering and scheduling of shipments of OI and ARV drugs?
7. Describe the procedures and timeframes for ordering products from suppliers/ donors? (Interviewer verify if procurement plans are based on forecasted needs and if take into account current inventory levels, losses/adjustments, order lead times of donor/suppliers, and shipment and handling schedules)
8. What are order lead times and supplier lead times if known?
9. Are/will procurements be limited to pre-qualified suppliers for all ART products?
10. What quality assurance procedures exist to ensure that products received meet defined standards of quality? (Interviewer to verify who is responsible and when/how often these procedures are conducted. Is there a documented procedure for reporting complaints re: product quality to suppliers? For recall and replacement by supplier?)
11. Describe the coordination between person(s) or unit(s) responsible for procurement and those responsible for in-country reception and distribution of commodities including drug products and laboratory reagents? For ARV drugs?.
12. How is procurement and delivery from multiple sources (govt funded, donated product, externally funded) coordinated to ensure reliable and uninterrupted supply of products?

F. Reception, Storage and Distribution (quality control and security)

1. Who is/will be responsible for in-country reception, inspection and verification of ARV drugs? STI drugs? OI drugs? Of HIV test kits and other laboratory reagents?
2. Who is/will be responsible for compliance with national drug regulatory authority and customs clearance requirements? (e.g., notification of arrival of consignment to port/customs authority, supplier documentation of quality testing, certificates of donation, filing of complaints of product quality)
3. What security measures are/will be followed to ensure the security of shipments of ARV drugs through reception and transport to the storage facility?
4. How will costs for wharfage, customs clearance, and transport of ARV drugs to the storage facility be covered?
5. What security measures are in place/planned to protect ARV drugs from pilferage and leakage in storage and distribution to ART sites? at ART sites? (locked cabinets, restricted access to storage areas, authorized personnel with restricted access to ARV drugs, reporting system for documenting receipt, storage, issuance, stock levels and transport of ARVs? Frequent physical inventories? Fewer storage points and distribution links)

G. Inventory Control System

Stakeholder Interviews:

Public Sector; MSD, MOH PMTCT and ART facilities

Private Sector: NGOs, FBOs, employer based, voluntary organizations

1. What inventory management procedures are/will be in place to ensure adequate stock levels of HIV/AIDS commodities (STI drugs, OI drugs, ARV drugs, HIV test kits) at PMTCT sites? at ART sites?
 - FEFO
 - Routine order intervals
 - Maximum/minimum stock levels
 - Use of logistics data for calculating order quantities
2. Which products do you experience stockouts of? Or have most difficulty obtaining a regular supply?

H. Product Use (see Service Delivery questions regarding provider qualifications and certification, training and supervision to ensure rational use of ARV drugs and quality of care)

Logistics MIS (decision-making for commodity management and re- supply)

Desk Review: CSEP, Process Mapping, logistics procedures manual for MOH Integrated Logistics Management

Stakeholder Interviews: JSI/DELIVER Resident Logistics Advisor, MSD

1. What is status of implementation of MOH integrated logistics system for management of public sector health commodities?

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

2. Which products are being managed through integrated logistics system using LMIS forms and pull system? At which facilities? Districts? Regions? At MSD?
3. What is status of implementation of maximum/minimum inventory control system for HIV/AIDS commodities at MSD? At hospitals and health facilities?
4. How can the design of the integrated logistics system be implemented for PMTCT and ART commodities at current and proposed sites?

IX. Laboratory Infrastructure and Capacity

1. What is the policy regarding minimum laboratory testing services required to support PMTCT? ART? in Tanzania? (from interviews and protocols)
2. Are laboratory testing protocols and procedures in place for HIV testing and ART? Is a copy available? When were the protocols updated?
3. Are laboratory technicians familiar with, or have they been trained in use of the laboratory equipment and diagnostic agents required for HIV testing and ART? At what level?
4. How many laboratory technicians are trained to provide these services?
5. What training is required to provide these services?
6. How is this training currently being provided?
7. What are future needs and plans?
8. Who are the key partners supporting laboratory services?
9. Who will supervise trained laboratory technicians? At what frequency?
10. Will nurse counselors be trained to perform rapid HIV tests?
11. What is the attrition rate of trained lab technicians and plans for retention?
12. What are the laboratory testing services currently available and being provided to support PMTCT? ART? What is their capacity in terms of volume?
 - Public sector
 - Private sector
 - Research and clinical (and overlap)?
 - What are the capacities at these sites?
 - Where are they located?
 - How long have they been operational?
 - What are the costs associated with each?
 - Is there any cost sharing arrangement?
13. Which of the following test will be required for ART Program implementation? (In Comments specify where available – type of lab facility)
14. What is the expected need for laboratory scale up to support the expansion of ART?
15. What standards of certification of lab equipment and performance are in use?
16. Who is responsible for monitoring the quality of laboratory services?
17. What have been the results of any large scale QA in the last 12 months?

18. What are the issues related to equipment maintenance and repair? What are current and future needs?
19. What are the sources of supply for HIV testing supplies? ART laboratory testing supplies?
20. How is procurement of these diagnostic agents and supplies financed?
21. Who procures them and how?
22. What are plans for immediate, medium term and long term funding and supply of laboratory testing equipment and supplies to support ART?
23. What are current and projected needs for these supplies? (i.e. what are actual quantities of HIV testing and ART laboratory supplies currently needed and if ART is introduced/expanded, how will supply needs be forecasted?)
24. Who calculates this and how?
25. What is current average consumption of lab supplies for testing at ART sites?
26. What are current stock levels of required laboratory supplies at ART sites?
27. How are these lab supplies ordered and re-supplied?
28. What are the record keeping and lab supply monitoring systems in place?
29. Is there an established laboratory supply inventory control system?
30. Can we get copies of any laboratory forms in use?
31. What security issues, if any, exist for storage, distribution and use of ART laboratory testing equipment and supplies?
32. Is there a policy for universal safety precautions?
 - Does it include guidelines for infection prevention?
 - Procedures for safe disposal of sharps? Biohazardous waste?

[See also “Facility Laboratory Services Questionnaire”]

Private Sector Providers Questionnaire

Questions for both Private Clinicians and Employer Based Programs

Private Sector General

1. What's your estimate of how many people (unpublished) are on ART through the private sector (clinicians and employer-based programs) at this stage? Where do most of them get their care?
2. How many private sector clinicians are currently specialized/trained in ART?
3. How organized are the private sector HIV Clinicians?
4. Is there any coordination between private sector providers with patients on ART?
5. What policies affect the private sector's provision of HIV/AIDS services? Do they differ between the non-profit and commercial providers?
 - What regulations exist for provision of services/licensing?
 - What oversight does the government provide?
 - How active is the government in promoting/supporting private sector provision of services?
 - Does the private sector have access to commodities procured through the public sector? Are there price controls?
 - Are there other operational policies or regulations that adversely or positively affect the private sector?

Service

1. How many patients to you have on ART? How long have they been on ART? Have any dropped out of ART? Have any of your patients failed treatment?

STGs/ product selection

1. What ART protocols do you use? Are other clinicians in the private sector using different ones?

2. What ARVs are your patients on? Are they branded or generic?
3. What do you counsel your patients regarding branded or generic?

Logistics- Access/source

1. Are your patients able to access the ARVs you prescribe?
2. How are they financed? (Self-pay, health insurance, employer subsidized) Do employees participate in cost sharing?
3. What is the source of the drugs your patients receive? (Accelerated Access Initiative branded drugs, generics)
4. What is the cost/month for the ARVs?
5. What problems are you/they having ensuring uninterrupted supply of the medicines?
6. What role do you see for the private sector pharmacies in expanding access to ART?
7. What do you think the benefits and risks would be for accessing your ARVs through the public sector supply? What incentive would the public sector need to provide to the private sector to do so?
8. Have you had any problems with your patients around adherence or pressure to share their medicines with family members?
9. What strategies do you and/or your patients use to improve adherence?
10. What do you think are the greatest challenges to scaling up access to ART (both in terms of additional sites capable of offering ART and numbers of patients at each site)?
 - in private sector?
 - in the public sector?

Quality

1. What ARV medicine quality issues are you worried about?
2. How prevalent are “suitcase” donations of ARVs? What are the issues around this that relate to quality of care?
3. Are there people on monotherapy and/or dualtherapy in Tanzania? Why?

4. What do you think the role of the private pharmacies should be in ensuring adherence and rational drug use?
5. What type of collaborative mechanisms should there be between physicians and pharmacists in the private sector to improve quality of care (relate to logistics)?
6. How much is resistance an issue at this stage?
7. What kind of data do you have available regarding toxicity to ARVs and people on second line therapy?
8. What is the role of traditional healers in ART in Tanzania? Have you heard of any problems with drug interactions?

Public/Private partnership

1. How important do you think private/public collaboration will be in ensuring quality of ART services and in expanding access to ART?
2. What assistance/guidance do you as a private practitioner/employer based program expect from the Government of Tanzania?
3. What type of private/public partnership would you like to see? What type of synergy would be most beneficial to private sector? (speak to both services and logistics of drug supply)
4. How much harmonization of care (drug supply) should there be between the private and public sector?
5. What incentives would you expect government to extend to the private sector in order to participate in a national ART program?

Employer-based Programs

1. What's the range of HIV/AIDS services that you provide through your program? (use services questionnaire)
2. What type of employees has access to ART through your program?
3. Are you planning to expand your in your ART program any time? (extend ART to more employees, ART to family members)? What are the main constraints to expansion?

Private Sector Pharmacy Questions

1. Obtain information on how many wholesale pharmacies and retail pharmacies sell ARVs.

Wholesalers and “Accelerated Access Initiative”

1. How is the “Accelerated Access Initiative” organized?
2. What “Accelerated Access Initiative” branded ARV drugs are available in Tanzania?
3. What ARV drugs are available?
4. Who are your clients (retail pharmacies? Voluntary agencies?) How many retail pharmacies and other outlets do you supply?
5. Do you conduct your own procurement? Is anyone collaborating (wholesalers/sites) in order to consolidate forecasts to achieve economies of scale and access better prices and better service?
6. What are the quantities of ARVs being moved through the private pharmaceutical sector as a whole? Is there a trend or is the quantity stable?
7. What are the prices? (Get price list if possible) How much markup is there at this level?
8. What types of logistics problems are being faced in sourcing/procuring and distributing them? (stockouts, expiry, availability of one/not the other)

Retail Pharmacies

1. Who are your clients (individuals or sites) ?
2. (Rational Drug Use) What type of information (adherence/drug interaction/resistance counseling) do you give to your clients who buy ARVs?
3. What strategies do you use for monitoring and influencing the prescribing practices of private sector clinicians?
4. Have you noticed clinicians/patients changing ARV medications frequently? Being prescribed wrong doses? Purchasing fewer than 3 ARVs? Stopping treatment for some time because they cannot afford it?
5. Who do you procure from? Is anyone collaborating (wholesalers/sites) in order to consolidate forecasts to achieve economies of scale and access better prices and better service?
6. What are your monthly sales of ARVs? Is there a trend or is the quantity stable?
7. What are the prices? (Get price list if possible) How much markup is there at this level?
8. What types of logistics problems are being faced in sourcing/procuring and in selling the ARVs? (stockouts, expiry, availability of one/not the other)
9. How organized are private sector pharmacy retailers?

PLWHAs Consumer Questionnaire

1. Are there PLWA'S who have become respected leaders in the struggle to promote HIV education and awareness? How have their efforts encouraged testing, broken stigma or advocated more care, support and treatment?
2. What formal or informal groups have emerged as major advocates and spokespersons to represent PLWA's?
3. Are there linkages between PLWA groups and major leadership stakeholders in government? In the Private sector areas such as industry, NGO's or FBO's? In the Public health sector?
4. Has any tension or conflict of interest developed with any major stakeholders that could be counterproductive or slow the process of care, support or treatment programs?
5. Are people who know their status receiving any kind of treatment, such as OI treatment, ARV treatment, palliative care or any other treatment?
6. Who if any caregivers (medical, traditional, spiritual or social) are identified and sought after as trusted providers for the treatment and care of HIV related illnesses or issues?
7. What medicine and care quality issues are they concerned about related to small-scale donations of ARV medicines?
8. What type of information are people with HIV/AIDS lacking about ARVs?
9. What are traditional healers saying about ARVs?
10. What type of side effects/drug interactions do people get from traditional medicine and ARVs?
11. What are the most common problems related to adherence for Tanzanians on ARVs?
12. Does/Will the issue of having to share drugs among family members create problems around adherence?
13. What type of regulation should there be around access to ARVs?
14. Clearly, once ARVs become accessible through the public sector, they will need to determine who gets them first. Besides clinical criteria, what other considerations should count in selecting who the ARVs will be targeted to.
15. Would a limited treatment program have a negative impact on the way ARV treatment was received and welcome by PLWA's?
16. Besides the ARV drugs, what's the next most important thing that PLWA's need?

Facility HIV/AIDS Services Questionnaire

Name of Facility: _____

Type of Facility: Government NGO Private Employer Based Voluntary/Mission

(Specify) _____
 Research Other

Date: _____ (day/month/year)

Interviewers: _____

Name and title of interviewees:

Name	Title	Name	Title
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

General notes: _____

Facility HIV/AIDS Services Questionnaire

Questions	VCT	PMTCT	Syphilis Screening	Family Planning	STI	OI	TB	PEP	HBC	ART	Counseling	IEC
I. Services A. Does this facility provide the following service(s)? If no, skip to question E.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
B. Is the service integrated with other HIV/AIDS services or vertical?	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical	<input type="checkbox"/> Integrated <input type="checkbox"/> Vertical
C. Is the service provided for inpatient, outpatient or outreach basis?	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach (TBA)	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach	<input type="checkbox"/> Outpatient <input type="checkbox"/> HCWs <input type="checkbox"/> Victims of sexual violence	<input type="checkbox"/> Outreach	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach	<input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient <input type="checkbox"/> Outreach
D. What services are provided?	<input type="checkbox"/> Counseling <input type="checkbox"/> Pre-Test <input type="checkbox"/> Testing <input type="checkbox"/> Post-Test	<input type="checkbox"/> ARV prophylaxis (mother & infant) <input type="checkbox"/> VCT <input type="checkbox"/> FP <input type="checkbox"/> Nutritional /BF counseling <input type="checkbox"/> Infant Co-trimoxazole prophylaxis <input type="checkbox"/> Child immunization <input type="checkbox"/> Syphilis screening	<input type="checkbox"/> RPR testing <input type="checkbox"/> VDRL or TPHA testing <input type="checkbox"/> TPPA/ <i>Determine</i> <input type="checkbox"/> Syphilis treatment <input type="checkbox"/> Partner Notification	<input type="checkbox"/> Family P/ing counseling <input type="checkbox"/> Contraceptive distribution <input type="checkbox"/> Condom distribution	<input type="checkbox"/> Diagnosis <input type="checkbox"/> Treatment <input type="checkbox"/> Syndromic approach <input type="checkbox"/> Condom distribution <input type="checkbox"/> VCT	<input type="checkbox"/> Laboratory diagnosis <input type="checkbox"/> Chest X-ray <input type="checkbox"/> Treatment <input type="checkbox"/> Counseling	<input type="checkbox"/> Skin test <input type="checkbox"/> X-Ray <input type="checkbox"/> Sputum smear <input type="checkbox"/> Treatment <input type="checkbox"/> DOT <input type="checkbox"/> TB Prophylaxis	<input type="checkbox"/> VCT <input type="checkbox"/> ARV prophylaxis	<input type="checkbox"/> DOT <input type="checkbox"/> Psycho-social support <input type="checkbox"/> Palliative care <input type="checkbox"/> Treatment counseling	<input type="checkbox"/> Treatment <input type="checkbox"/> Monitor side effects/toxicity <input type="checkbox"/> Monitor resistance <input type="checkbox"/> Adherence counseling	<input type="checkbox"/> VCT <input type="checkbox"/> Prevention/ 2° positive prevention <input type="checkbox"/> Nutritional/ Breastfeeding <input type="checkbox"/> Family Planning <input type="checkbox"/> Adherence counseling <input type="checkbox"/> Administer pediatric drugs <input type="checkbox"/> PEP <input type="checkbox"/> Psychosocial	

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E. Are patients referred for this service?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
F.1 If yes, where are patients referred to?												
G. Describe the referral process.												
H. How is referral system working? do people go to referral sites?												

Questions	VCT	PMTCT	Syphilis Screening	Family Planning	STI	OI	TB	PEP	HBC	ART	Counseling	IEC
II. Uptake of program services												
A. How long have these services been provided?												
B. What has uptake of services been? (high demand? low coverage?)												
C. How has availability of products affected uptake of services?												
D. What are facility plans for service expansion?												

Facility HIV/AIDS Services Questionnaire

Questions	VCT	PMTCT	Syphilis Screening	Family Planning	STI	OI	TB	PEP	HBC	ART	Counseling	IEC
III. Staffing and teamwork A. At this facility what cadres and number of staff are required? (write # in box)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)
B. How many of each cadre currently on staff? (write # in box)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)
C. Among the staff, how many were trained in these services within the last two years?	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Lab. Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)
D. How much staff turnover in last two years?												
E. What are training needs for each service?												

Facility HIV/AIDS Services Questionnaire

Questions	VCT	PMTCT	Syphilis Screening	Family Planning	STI	OI	TB	PEP	HBC	ART	Counseling	IEC
F. Teamwork for PMTCT and ART.												
1. Is there an interdisciplinary team?												
2. Who are staff members?												
3. How often are interdisciplinary meetings held? Specify <input type="checkbox"/> Weekly <input type="checkbox"/> Bi-weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Other												
4. What service coordination issues and problem-solving are addressed in these meetings?												

Facility HIV/AIDS Services Questionnaire

IV. Community Involvement	VCT	PMTCT	Syphilis Screening	Family Planning	STI	OI	TB	PEP	HBC	ART	Counseling	IEC
A. Are the following groups or leaders involved in your services?	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)	<input type="checkbox"/> People living with HIV/AIDS <input type="checkbox"/> Community advocacy groups <input type="checkbox"/> Religious leaders <input type="checkbox"/> Health care workers <input type="checkbox"/> Traditional birth attendants <input type="checkbox"/> Traditional healers <input type="checkbox"/> Educators /teachers <input type="checkbox"/> Parent organizations <input type="checkbox"/> Youth groups <input type="checkbox"/> Workers unions <input type="checkbox"/> Private sector <input type="checkbox"/> Other (Specify)
B. How are they involved? (Interviewer please comment)												

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

Questions	VCT	PMTCT	Syphilis Screening	Family Planning	STI	OI	TB	PEP	HBC	ART	Counseling	IEC	
V. Policy for Service Provision A. Do you have written guidelines or protocols indicating how this service should be provided? (if yes, request to see a copy)	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No	<input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No
B. Do you have policy for : Patient Confidentiality Informed consent	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
C. How is patient confidentiality ensured? (is there an identifying code system?)	Describe:												
D. Is there locked storage of patient records ?	Describe:												

Questions	VCT	PMTCT	Syphilis Screening	Family Planning	STI	OI	TB	PEP	HBC	ART	Counseling	IEC
VI. Record Keeping A. What clinical patient records are used for each service? (is there a comprehensive HIV/AIDS clinical patient form?)	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record	<input type="checkbox"/> Name of form/register: <input type="checkbox"/> Observed <input type="checkbox"/> Not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No record
Questions VII. Leadership and Program Mgmt. A. Who is responsible for coordinating each service?	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Administrator <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Laboratory Tech <input type="checkbox"/> Pharmacist <input type="checkbox"/> HBC <input type="checkbox"/> Coordinator <input type="checkbox"/> Community Liaison <input type="checkbox"/> Counselor <input type="checkbox"/> Other (specify)
B. How long have you been in this position?												

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

Questions continued	VCT	PMTCT	Syphilis Screening	Family Planning	STI	OI	TB	PEP	HBC	ART	Counseling	IEC
C. What challenges have you faced in implementation of services?												
D. What solutions have been proposed or implemented? How have they worked?												
VIII. Universal safety precautions A. Do written policies exist for: (request to see copy) <ul style="list-style-type: none"> • Infection Prevention? <input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No • Safe disposal of sharps, biohazardous waste? <input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No • Use of protective gear (e.g., masks, gloves, apron)? <input type="checkbox"/> Yes, observed <input type="checkbox"/> Yes, not seen <input type="checkbox"/> Don't know <input type="checkbox"/> No B. Have you experienced problems in implementing these policies? Please describe.												
C. Is protective gear available? (e.g., gloves, gown, masks, eye shield, aprons) <input type="checkbox"/> Yes <input type="checkbox"/> No												
D. Is equipment functioning? (e.g., lab, autoclave, incinerator)												
E. Are consumable supplies available in sufficient quantities? (e.g., syringes, needles, disinfectant, gauze, cotton, alcohol swabs etc)												
Any additional comments:												

<p>IX. Infrastructure and Utilities</p> <p>Does your facility have:</p> <ul style="list-style-type: none"><input type="checkbox"/> Reliable electrical power supply<input type="checkbox"/> Reliable water supply<input type="checkbox"/> Convenient waiting areas<input type="checkbox"/> Private counseling rooms<input type="checkbox"/> Adequate storage space for pharmaceuticals and supplies<input type="checkbox"/> Secure storage for high value products (describe)<input type="checkbox"/> Laboratory (if yes, complete attached Lab Services Questionnaire)	<p><i>Interviewer comment on how infrastructure and utilities problems affect service provision and product availability :</i></p>
--	--

Facility Laboratory Services Questionnaire

Name of Facility: _____

Type of Facility: Government NGO Private Employer Based Voluntary/Mission
 Research Other

(Specify) _____

Date: _____ (day/month/year)

Interviewers: _____

Name and title of interviewees:

Name	Title	Name	Title
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Level, if applicable **Public** **Private**
 National Stand alone
 Regional Health facility based
 District
 Health Center

Test performed on site	Y/N	Client cost per test	Staff trained in the last 2 years ?	Equipment available today?	Equipment functional ?	Reagents available today?	Is there a register for results to be recorded?	Comments
PMTCT								
Minimum Package								
Routine								
Hemoglobin								
Rh D Blood Group								
VCT/HIV Diagnosis								
Initial: HIV rapid or long ELISA								
Confirmatory: HIV rapid or long ELISA								
Syphilis Screening								
Initial : RPR or VDRL								
Confirmatory : TPPA or TPPA Determine								
Infant HIV Diagnosis								
Polymerase chain reaction (PCR) or p24Ag ELISA								
STI Diagnosis								
Gram Stain								
Culture & Sensitivity								
OI Diagnosis								
OI-related lab: PCP								

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Test performed on site	Y/N	Client cost per test	Staff trained in the last 2 years ?	Equipment available today?	Equipment functional ?	Reagents available today?	Is there a register for results to be recorded?	Comments
	Y/N							
Cryptococcal diagnosis								
TB Diagnosis								
Acid Fast Bacillus (AFB)								
ART Minimum Package								
<i>Routine Tests</i>								
Full Blood Count (FBC)								
Total lymphocyte count								
White blood cell count								
Hemoglobin								
HBs Ag (Hep B antigen)								
Hematocrit								
Liver function tests (enzymes)								
Urea								
Bilirubin								
Creatinine								
Electrolytes								
Cholesterol and lipids								
Fasting blood sugar								
Urinalysis								
Pregnancy Test								
Malaria Smear								

Test performed on site	Y/N	Client cost per test	Staff trained in the last 2 years ?	Equipment available today?	Equipment functional ?	Reagents available today?	Is there a register for results to be recorded?	Comments
Additional ART								
Laboratory Services								
Viral Load								
CD4+ Cell Count								

Central Level Laboratory Services Questions:

1. What is the expected need for laboratory scale up to support the expansion of PMTCT? ART?
2. What standards of certification of lab equipment and performance are in use?
3. Who is responsible for monitoring the quality of laboratory services?
4. What have been the results of any large scale QA in the last 12 months?
5. What are the issues related to equipment maintenance and repair? What are current and future needs?
6. What are the sources of supply for PMTCT laboratory testing supplies? ART laboratory testing supplies?
7. How is procurement of these diagnostic agents and supplies financed?
8. Who procures them and how?
9. What are plans for immediate, medium term and long term funding and supply of laboratory testing equipment and supplies to support PMTCT? ART?
10. What are current and projected needs for these supplies? (i.e. what are actual quantities of HIV testing, PMTCT and ART laboratory supplies currently needed and if PMTCT/ART is introduced/expanded, how will supply needs be forecasted?)
11. Who calculates this and how?
12. What are current consumption of laboratory supplies for testing at PMTCT sites? ART sites?
13. What are current stock levels of required laboratory supplies at PMTCT sites? ART sites?
14. How are these laboratory supplies ordered and resupplied?
15. What are the record keeping and laboratory supply monitoring systems in place?
16. Is there an established laboratory supply inventory control system?
17. Can we get copies of any laboratory forms in use?
18. What security issues, if any, exist for storage, distribution and use of PMTCT and ART laboratory testing equipment and supplies?
19. What is the human resource capacity and manpower level of lab technicians in the country ?
20. Is there a policy for universal safety precautions for healthcare worker and patient safety in place?
 - Infection Prevention Guidelines?
 - Procedures for safe disposal of sharps and bio-hazardous material?

Additional Facility Level Laboratory Services Questions:

1. Who is responsible for monitoring the quality of laboratory services?
2. What are the issues related to equipment maintenance and repair? What are current and future needs?
3. Where/who do you receive/order diagnostic agents and supplies from?
4. How are these laboratory diagnostic agents and supplies ordered and resupplied ?
5. What is current consumption of laboratory supplies for testing at PMTCT sites? ART sites?
6. What are current stock levels of required laboratory supplies at PMTCT sites? ART sites?
7. What record keeping and laboratory supply monitoring systems are in place ?
8. Is there an established laboratory inventory control system ?
9. May we have copies of any laboratory forms in use ? (if not, document data collected on stores ledgers, stock cards or laboratory registers)
10. What security issues, if any, exist for storage, distribution and use of PMTCT / ART laboratory testing equipment and supplies ?
11. Are Universal Safety Precautions practiced at this facility?
 - are documented procedures for infection control and safe disposal of sharps and bio-hazardous waste available at the facility ?
 - are supplies and equipment available for infection control and safe disposal of sharps and bio-hazardous material at the facility?

Facility Logistics Management Questionnaire
(use with Public, NGO, Voluntary, and Employer-based sites)

Name of Facility: _____

Type of Facility: Government NGO Private Employer Based Voluntary/Mission
 Research Other (Specify) _____

Date: _____(day/month/year)

Interviewers: _____

Name and title of interviewees:

Name	Title	Name	Title
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

General notes:

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

Product	Managed at Facility? Y/N	Stock Card		Stock Count Quantity	AMC (3 months of data)	Months of Stock on Hand	Maximum stock level set for this level of system	Duration of Stock Out (last 6 months)	Expired or Damaged Product	Date of last stock count
		Avail ? Y/N	Used ? Y/N							
Tracer Commodities										
DDA:										
Disposable Latex Gloves										
B complex										
Multivitamins										
PMTCT										
Zidovudine (also AZT)										
Nevirapine 200 mg										
Nevirapine syrup										
Cotrimoxazole syrup										
TB and OI drugs and lab supplies										
Fluconazole (Diflucan)										
Rifampicin										
Isoniazide										
Pirazinamide										
Ethambutol										
Streptomycin										
10 ml. Syringes										
21 g needles										

Product	Managed at Facility? Y/N	Stock Card		Stock Count Quantity	AMC (3 months of data)	Months of Stock on Hand	Maximum stock level set for this level of system	Duration of Stock Out (last 6 months)	Expired or Damaged Product	Date of last stock count
		Avail ? Y/N	Used ? Y/N							
ARVs for PEP and/or ART										
List ARVs available at sites*										

* ARVs other than for PMTCT

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

	Narcotics	Infection control	TB medicines	Old drugs	Laboratory consumable supplies	ARVs for PMTCT	ARVs for PEP	ARVs for ART
Essential Data: Records and Reports								
1. Where do you record consumption/use of these products. (Get name and copy)								
2. Who uses this information?								
3. How is it used?								
4. Are any logistics reports prepared for these commodities? (Get name and copy)								
5. What type of information is included?								
6. Who prepares logistics reports?								
7. Is the logistics information combined with service delivery information?								
8. Do suppliers of commodities receive the logistics information?								

Annex A

	Narcotics	Infection control	TB medicines	OT drugs	Laboratory consumables & supplies	ARVs for PMTCT	ARVs for PEP	ARVs for ART
9. What information is included?								
10. Where do you send them?								
11. How often do you prepare logistics reports?								
12. Is required stationary available for management of these supplies?								
Ordering and Re-supply								
13. Who determines your re-supply quantities?								
14. Have you been told how often you're supposed to order? (state frequency)								
15. How often do you order?								
16. How do you calculate how much you need? (methodology/ data elements)								

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

	Narcotics	Infection control	TB medicines	Old drugs	Laboratory consumable supplies	ARVs for PMTCT	ARVs for PEP	ARVs for ART
17. Are there financial issues that force you to limit the amount you want to order of each product?								
18. Does anyone verify your order? Who?								
19. Where does this facility submit its order?								
20. How do you submit it (fax, at meeting, etc)								
21. How long does it take to receive what you ordered?								
22. Do you usually get what you ordered?								
23. How did you learn how to order?								

	Narcotics	Infection control	TB medicines	OT drugs	Laboratory consumables and supplies	ARVs for PMTCT	ARVs for PEP	ARVs for ART
24. Who is responsible for transporting the medicines and supplies to here?								
25. What type of transportation do they use?								
26. When is transportation irregular? (rain)								
Organizational Support for Logistics								
27. Do you have a job aid/ procedures manual/ or written guidance for how to store, order, dispense, any of these medicines/supplies?								
28. How did you learn how to use the forms and how to calculate how much to order?								
29. Who from this site supervises your job with logistics?								
30. When was the last time he/she supervised you?								

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	Narcotics	Infection control	TB medicines	Old drugs	Laboratory consumable supplies	ARVs for PMTCT	ARVs for PEP	ARVs for ART
31. What happened during that visit? What did they look at, review, correct, remind/teach you?								
32. Who (not from this site) supervises the logistics at this site?								
33. When was the last time he/she supervised this site?								
34. What happened during that visit? What did they look at, review, correct, remind/teach you?								
Special Product Considerations								
35. How do you package tablets and capsules you dispense to patients?								
36. Do you keep any of these supplies in the maternity ward?								

Storage Conditions Table

To qualify as “yes,” all products and cartons must meet the criteria for each item.

No	Description	Yes	No	N/A	Comments
1.	Products that are ready for distribution are arranged so that identification labels and expiry dates and/or manufacturing dates are visible.				
2.	Products are stored and organized in a manner accessible for First-Expiry / First-Out (FIFO) counting and general management.				
3.	Cartons and products are in good condition, not crushed due to mishandling. If cartons are open, check if products are not wet or cracked due to heat/radiation (fluorescent lights in the case of condoms)				
4.	The facility makes it a practice to separate damaged and/or expired products from good products and remove them from inventory.				
5.	Products are protected from direct sunlight at all times of the day and during all seasons.				
6.	Cartons and products are protected from water and humidity during all seasons.				
7.	Storage area is visually free from harmful insects and rodents. (Check the storage area for traces of rodents (droppings) or insects).				
8.	Storage area is secured with a lock and key, but accessible during normal working hours, with access limited to authorized personnel.				
9.	Products are stored at the appropriate temperature during all seasons according to product temperature specifications.				
10.	All hazardous waste (e.g., needles, toxic materials) is properly disposed of and non-accessible to non-medical personnel.				
11.	Roof is maintained in good condition to avoid sunlight and water penetration at all times.				
12.	Storeroom is maintained in good condition (e.g., clean, all trash removed, shelves are sturdy, boxes are organized).				
13.	The current space and organization is sufficient for existing products and reasonable expansion (i.e., receipt of expected product deliveries for the foreseeable future).				

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

The additional standards below can be applied to any facility large enough to require stacking of multiple boxes.

No.	Description	Yes	No	N/A	Comments
14.	Products are stacked at least 10 cm off the floor.				
15.	Products are stacked at least 30 cm away from the walls and other stacks.				
16.	Products are stacked no more than 2.5 meters high.				
17.	Fire safety equipment is available and accessible (any item identified as being used to promote fire safety should be considered).				
18.	Products are stored separately from insecticides and chemicals.				

Additional guidelines for specific questions:

Item 2: In noting proper product arrangement, the shelf life of the different products should be considered.

Item 3: Cartons should be checked to determine whether they are smashed due to mishandling. The conditions of the products inside opened or damaged cartons should also be examined to see if they are wet, cracked open due to heat/radiation (e.g., because of fluorescent lights in the case of condoms) or crushed.

Item 4: The discarding of damaged or expired products should be conducted according to the facility's procedures (which may differ from one facility to another). Please specify if procedures exist and note what they are.

Item 7: It is important to check the storage area for traces of rodents (droppings) or insects harmful to the products.

Item 8: This refers to either a warehouse secured with a lock or to a cabinet with a key in a clinic.

Item 17: Fire safety equipment does not have to meet international standards. Any item identified as being used to promote fire safety (e.g., water bucket, sand) should be considered.

Security For High Value/Controlled Substances (VALIUM and ARVs if Managed)

No.	Description	Yes	No	N/A	Comments
1.	Is there a separate, secure storage area for high/value products or controlled substances?				
2.	Is there a doubling-up of staff for picking, packing, dispensing and recording of issues for these commodities? (i.e. staff person prepares the order, supervisor verifies?)				
3.	Do both the staff person and supervisor conduct physical inventory of remaining stock at the end of the day?				
4.	Is there a doubling-up of staff for unpacking, verification, and recording of receipts for these commodities? (i.e. staff person and supervisor are both present during receipt process?)				
5.	Are there unannounced audits or high value/ controlled substances performed? (Specify frequency and procedure in comments section)				
6.	Describe the security mechanisms in place for protecting high value/controlled substances during transit?				
7.	Describe the security mechanisms in place for dispensing high value/controlled substances to patients?				
8.	Are theft/loss indicators being monitored for these commodities at this site?				
9.	Is staff performance evaluation and compensation (rewards and penalties) tied to theft/loss indicators for these commodities?				

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

COMMENTS OR GENERAL OBSERVATIONS ON COMMODITIES MANAGEMENT AT THIS SITE:

Tool to Assess Site Readiness for Initiating Antiretroviral Therapy (ART)



Version 1.1

September 2003



DELIVER
No Product? No Program. Logistics for Health

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John Snow, Inc.

44 Farnsworth St.

Boston, MA USA

Phone: 617-482-9485

Fax: 617-482-0617

Email: HIV/AIDS@jsi.com

Internet: www.jsi.com

DELIVER

1616 North Fort Myer Drive, 11th Floor

Arlington, VA 22209 USA

Phone: 703-528-7474

Fax: 703-528-7480

Email: deliver_project@jsi.com

Internet: deliver.jsi.com

Introduction

The goal of this tool is to develop a set of criteria to assess a site's readiness to implement antiretroviral therapy, and to select ART sites based not on site type, but on capacity, vision, and activities needed for rational introduction and expansion of ART into HIV care.

The tool can also be used for site self-assessment, to assist sites and donors to identify areas in need of technical assistance, and to assist programs in determining sites for ART introduction and scale up. Finally, the tool can identify areas in which site programs can serve as resources for other programs.

Six program domains are reviewed to assess site readiness: Leadership and Program Model; Services and Clinical Care; Management and Evaluation; Human Resource Capacity; Lab Capacity, and Drug Management and Procurement. Each domain has areas that help define capacity within the domain. The evaluation of these areas within the domains and the overall score determine which of the five stages a program falls into. The stages rating system can be used for the site to identify steps needed to advance a site along the stages from a Program Mobilization stage (Stage 1) to an Action rating (Stage 4) and, ultimately, Support, Maintenance, Expansion, and Serving as Resource (Stage 5). Examples of technical assistance, training, and resources that may be needed to advance a site to a higher stage are suggested for each rating at the end of the tool.

We would like to hear from you—

We want this tool to be as useful as possible. If you have any comments or suggestions for improvement, we want to hear from you. We will make changes to future versions, and we would like to incorporate your ideas based on your experience with the tool. Please send any comments to the attention of the HIV/AIDS Center at jsinfo@jsi.com.

Assessment Tool

Domain 1: Leadership and Program Model					
Area	1	2	3	4	5
Leader	Has no identified leadership or commitment at site or in community.	Has some leadership for program at some level at site or in community.	Has leader with vision and some experience managing health care-related programs, but needs assistance with designing and setting up program and protocols.	Has leader with vision and experience managing HIV-related health care programs, and is engaged in establishing an ART program.	Has strong leader who is spearheading ARV program, and has experience or training in managing ARV programs.
Model of Care	Has not identified any potential models of care for the ART program.	Has some potential models of care that could be adapted to ART but needs assistance.	Has chosen or adapted model of care but lacks details.	A detailed model exists, and operating procedures are drafted or being created.	Detailed model of care and operating procedures both formalized and approved.
ART Protocols	May have experience with non-HIV medical care protocols, but no knowledge of or access to draft or national HIV protocols.	Has experience with some HIV-related care protocols but no experience with ARV protocols.	Has access to national protocols but have not been adapted to the site or have not been approved by site management.	Has only working draft guidelines (not yet approved/ finalized for site) but lacks site specific policies and procedures in some areas.	Has approved protocols for ARV eligibility, screening criteria, regimens, initiation, clinical and lab monitoring and follow-up, adherence, management of side effects, treatment interruption, and treatment failure.

Total Leadership Score: _____

Leadership Domain Score (Total Leadership Score/3): _____

Domain 2: Services and Clinical Care

Domain 2: Services and Clinical Care					
Area	1	2	3	4	5
ART	Has few, if any, staff with outpatient HIV care experience; no ART experience or training.	Has outpatient HIV care experience but no ART training or experience.	Has some training with ART at certain levels of staff but still inadequate at some levels.	Has some training with ART but limited experience and may require additional training of staff.	Has appropriate training and experience in ART in all key areas and in most supportive positions.
Comprehensive Services ¹	Has very limited HIV primary care or other important services either on-site or through linkages.	Has access to VCT on-site or by referral; provides HIV primary care or other outpatient HIV medical services on-site; inadequate capacity to expand services without TA.	Has some outpatient HIV medical services on-site or linkages to these services; provides STI treatment and VCT on-site.	Has PMTCT including VCT; has more extensive HIV outpatient care services provided on-site or by coordinated established linkages including OI and TB treatment. Has either gaps in some support services or linkages to these services or inadequate capacity in areas.	Has on-site essential services for ART program including adherence, counseling, patient education, monitoring and management of toxicities, and treatment failures. Has full scope of other services on-site or has coordinated linkages to these services (VCT, HIV primary care, OI prevention and treatment, STI, management, PMTCT, TB management, counseling, nutritional counseling, linkage with inpatient care, access to assistance with concrete support (food, housing), home-based care, family planning, and positive/secondary prevention).

¹ Comprehensive services important or recommended for ART programs include many aspects of comprehensive HIV care including VCT, HIV primary care, ability to screen for eligibility for ART (VCT, clinical, lab), monitoring and management of toxicities and treatment failures, adherence support, prevention and management of OIs including TB (on-site or by referral), linkage with inpatient care, STI management, PMTCT, supportive counseling, home-based care patient education, adherence support and monitoring, and linkages to other needed services (food/nutrition, transportation, etc.). All services should be provided on-site through close linkages with other programs. Other services that should be available through linkages or on-site include family planning, prevention counseling, and home-based care.

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Domain 2: Services and Clinical Care (continued)					
Area	Physical Space	Extremely limited space overall, no confidential space, and limited plan for expansion.	Has no designated space yet for ART but has a plan.	Has some space for ART and confidential space but overall space is limited.	Has defined and adequate clinic space for ART program including access to confidential space.
	Has no space for ART, no confidential space, and no plan for location or expansion. 1	2	3	4	5
Community Involvement	No community network, involvement, or support established or initiated. 1	Community interest generated through community mobilization for support. Networking initiated including plans to involve PLWHAs. 2	Community meetings underway; community leaders contacted; linkages being established; needs assessment underway; formal or informal input from PLWHAs. 3	Community networking established between stakeholders in areas of health admin., govt. community activists, faith-based organizations, etc. Community needs assessment complete; active involvement of PLWHA groups. 4	Networking has developed into formal referral or community collaboration; has full buy-in of stakeholders including PLWHAs, traditional healers, govt. admin., other service organizations, and community leaders. 5

Total Services Score: _____ Services Domain Score (Total Services Score/4): _____

Domain 3: Management and Evaluation					
Area					
Health Management Information Systems (MIS)	Has no HMIS to track patients; no or very basic medical record system.	Has basic HMIS to track patients but no specific HIV treatment information included. Some elements of medical record system.	Has some elements of HMIS but limited capacity for expansion to meet ARV program needs; requires improvement in medical record capacity or management.	Has system to follow patients, but may have gaps in tracking patients and medical charting capacity.	Has system in place for tracking patients, medical records, and charting for clinical care and labs including specific forms/flow sheets or other processes for ART.
	1	2	3	4	5
Program Monitoring and Evaluation	Has no procedures or plans for program level M&E for any programs.	May have some procedures/plans for program level M&E for other programs but inadequate for immediate addition of ART to site.	Has HIV-related M&E, some training, or access to other M&E resources, but no specific procedures for M&E of ART or quality improvement plan in place.	Has some procedures or plans for program level M&E and quality improvement for ART program but plans need improvement.	Program level M&E includes process and outcome measures of HIV care program including ART; results are routinely used for program decision making through quality improvement processes.
	1	2	3	4	5

Total Management and Evaluation Score: ____ Management and Evaluation Domain Score (Total Management and Evaluation Score / 2): ____

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Domain 4: Human Resource Capacity					
Area					
Staffing	Has multiple vacancies, including key positions in clinical and support staff, and no clear capacity to fill.	Has core clinical and support staff but inadequate capacity to initiate program or to fill additional vacancies.	Has core staff and some support staff. Has adequate staff to implement but not sustain long-term or expand ART program. Has begun to clearly outline needs and has plan or proposals to fill them.	Lacking in some clinical or support staffing positions; able to implement and sustain but not expand ART program. Has clearly outlined staff needs and plan or proposal to fill them.	Fully staffed according to model of care and capacity to implement, sustain, and expand ART program.
Training and Skills Development	Existing staff have no training or experience in HIV outpatient care or ART; no plans for staff training or skills development. Limited or no on-site access to educational and resource materials.	Existing staff has either some training or some experience in HIV outpatient care or ART. May have access to training program in other areas but no program for ART. Limited or no on-site access to educational and resource materials.	Has received some training in and have limited experience with HIV outpatient care and/or ART. Has access to training program in ART, and key clinical staff have been trained or will be trained as program gets underway. Limited or no on-site access to educational and resource materials.	Minimum key staff have been fully trained in prescribing, follow-up, and adherence with ARVs in treatment. Has plan in place for further training for additional staff. Developing on-site resources and educational materials.	Has adequately trained staff in all positions with experience in HIV primary care and ART including prescribing, follow-up, adherence support, and counseling. Active training and skills development plan for all staff members. On-site resources and educational materials exist.
Management, Supervision, and Staff Retention	Has no plan for staffing needs, supervision, management, or retention; will require extensive planning.	Developing staffing plan but needs additional expansion of system for hiring, supervision, and management.	Has reactive supervision and management system with informal plan for proactive hiring process, staff supervision, and/or management system.	Has most of staffing, management, and supervision plan in place and operational; may require additional proactive management.	Implementing a proactive supervision and management system, including identified staffing responsibilities, ongoing retention plan, knowledge of staffing needs, and plan to fill gaps in staffing needs.
	1	2	3	4	5

Total Human Resource Score: _____ Human Resource Domain Score (Total Human Resource Score / 3): _____

Domain 5: Lab Capacity					
Area					
Testing Capability	Has limited or no access to required labs as defined in minimum WHO/national protocols; no quality assurance mechanism.	Has access to required labs as defined in WHO/national protocols but is not reliable.	Has access to required labs for screening and monitoring as defined in WHO/national protocols.	Has more extensive lab capability, such as liver function test; access to required labs for screening and monitoring, excluding CD4s and viral load count; able to do total lymphocyte count.	Has full spectrum of tests as required by site ARV protocol including CD4 count; high-quality lab and consistent availability of reagents and laboratory supplies.
Quality Standards	Has no quality of standards; no program or budget for equipment maintenance; limited availability of lab supplies.	Has poor quality of lab standards; unreliable equipment maintenance program and QA process in place.	Has somewhat reliable equipment with some functioning maintenance program and lab supply availability. Lab has some quality standards but compliance is irregular.	Has relatively reliable equipment with back-up plan and equipment maintenance program in place. Lab does some internal and external QA. May have occasional breaks in service.	Has internal and external quality assurance program, reliable equipment maintenance program, and continuous availability of reagents and other lab supplies.
	1	2	3	4	5

Total Lab Score: _____ Lab Domain Score (Total Lab Score/2): _____

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Domain 6: Drug Management and Procurement					
Area					
Supply Chain	Has extremely limited supply chain in place; needs improvement in multiple areas including procurement and management of ARVs and creating a QA process ² for product availability. 1	Has somewhat reliable supply chain in place but needs to improve in one or more areas and needs adaptation to accommodate specific requirements of ARVs; has very limited QA process for product availability. 2	Has supply chain in place but may need improvement in one or more areas and may need adaptation to accommodate specific requirements of ARVs; has unreliable QA process for product availability. 3	Has secure supply chain but may need TA in inventory management procedures for ARVs; has limited QA process for product availability. 4	Has secure supply chain ³ from supplier to service site including appropriate and secure local storage and dispensing and QA system for monitoring product availability to prevent stockouts of ARVs at site. 5
Pharmacy Management	Has no established procedures for ARVs. Does not follow inventory management procedures for other essential drugs. 1	Has no inventory management procedures for ARVs and limited, unreliable inventory management procedures for other essential drugs. 2	Has no inventory management procedures for ARVs but has established inventory management procedures for other essential drugs that are clearly implemented. 3	Is developing inventory management procedures for ARVs but incomplete. Has established inventory management procedures for other essential drugs. 4	Has established ARV inventory management tools and procedures including forecasting/calculating resupply orders, routine stock status reporting, dispensing, and ordering emergency supplies. Has same for other essential drugs. 5
Financial Resources for ARV and Other Drug Procurement	Has not taken steps to identify sources of ARVs. Very limited resources for procurement of drugs for management of HIV-related complications, ARV-related side effects, and other essential drugs. 1	Has taken steps to identify sources of ARVs; limited resources for procurement of drugs for management of HIV-related complications, ARV-related side effects, and other essential drugs. 2	Has identified potential funding sources for short-term ARV procurement but commitment is not finalized. Need additional funding sources to improve availability of other medications for management of HIV-related complications, ARV-related side effects, and other essential drugs. 3	Has short-term source of funding for initial ARV procurement but resources for future funding are insecure. Has adequate supplies of medications for management of HIV-related complications, ARV-related side effects, and other essential drugs. 4	Has secured source(s) of funding for ARVs required for current and planned patient load for at least the next year and has a commitment and plans for follow-up funding; has adequate supplies of medications for management of HIV-related complications, ARV-related side effects, and other essential drugs. 5

² QA process for supply chain to be interpreted as functioning LMIS and adequate logistics supervision.

³ Secure supply chain implies safe transport and storage, clear source of resupply of drugs, inventory control, established stock levels, resupply intervals and buffer stocks, and capacity and plans for drug forecasting.

Total Drug Management Score: _____ **Drug Management Domain Score (Total Drug Management Score/3):** _____

Determining a Site's Program Readiness Stage
Scoring Summary

What Does the Score Mean?

Bring forward the score from each domain and add them together to get an Overall Program Total. Your program stage is based on both the domain score and the lowest score in an area.

	Domain Score	Lowest Score from within Domain
Leadership and Program Model	_____	_____
Services and Clinical Care	_____	_____
Management and Evaluation	_____	_____
Human Resource Capacity	_____	_____
Lab Capacity	_____	_____

Drug Management and Procurement _____

Overall Program Total _____

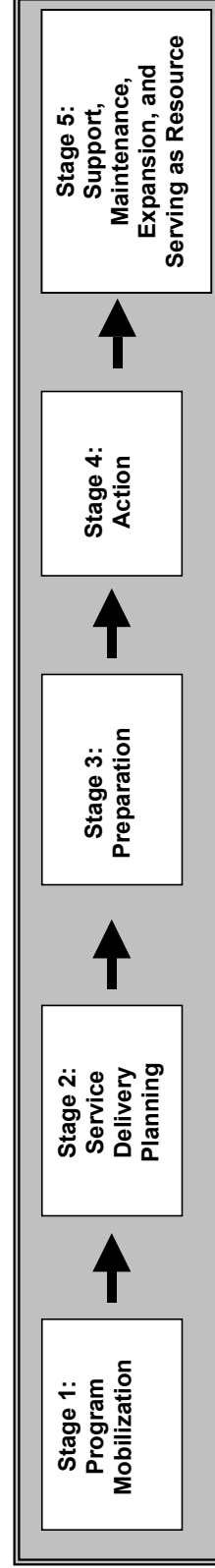
Scoring Range:

Overall Program Total	Stage
1-8	1
9-13	2
14-18	3
19-24	4
25-30	5

This qualitative tool can indicate, generally, where an organization falls along the Readiness Scale (1 to 5) to initiate an ART program. This tool presents a general assessment without emphasizing the importance of one domain over another. An overall score that places a site at Stage 4 or 5 indicates a program is the most prepared to initiate ART, and a score that places a site at Stage 1 indicates that the program needs significant work and planning to start and manage an ART program.

It is recommended that a site have at least a score of "3" in each domain to begin ART. If any area scores less than 3, the maximum a site can be a Stage 3, and technical assistance should be provided to bring this area up to at least a 3 prior to initiation of ART program.

Each stage is described below with specific activities and recommendations that will move an organization closer to Stage 5—Support, Maintenance, Expansion, and Serving as Resource.



**Stage 1:
Program
Mobilization**

Stage 1: Program Mobilization

These sites are doing limited or no HIV outpatient or inpatient care. They are not considering providing ARVs based on capacity constraints, unwillingness, or other barriers. There is no leader willing to champion the ART program.

Sites at this stage need training and education to expand capacity and knowledge, move to Stage 2, and identify a leader. Other help is needed in technical assistance and support to begin several components including program design and planning, assessment of current capacity, and projecting for staff and other resources required before ARV introduction. These sites might be considered for follow-up of patients on ARVs as a first step, with capacity to initiate ARVs in the future.

Sites may need to—

Leadership

- Identify or recruit a leader and implement training to develop a vision and a will to embark on an ARV program.
- Design a program, including identification of space and model of care.
- Create links with other sites in-country or the region already providing ARV treatment, if possible, for local technical assistance and learning about successful models.

Protocols and Management

- Begin to identify and adopt protocols for basic HIV care and OI prophylaxis and treatment.
- Receive technical assistance in development or improvement in HMIS system including patient tracking, medical records, and charting.
- Access assistance in developing program indicators and appropriate system for M&E of HIV care, which can be expanded in the future for the ART program.

Services

- Identify critical areas that need immediate expansion to reach the next level (i.e., VCT, OI treatment, etc.).
- Coordinate programs with referral system to ensure follow-up and continuum of care.

Human Resource Capacity

- *Identify resources/mechanisms to recruit new staff or change models to reflect personnel types that are available.*
- Expand and/or train staff resources in one or more areas to meet at least minimum essential staff for prescribing, follow-up, and adherence.

Lab

- Receive assistance in developing reliable access to lab services, whether on-site or referral, training, supplies, and expansion, as required by minimum standards from site protocols.

Drug Management and Procurement

- Improve policies and procedures for supply chain management and address identified gaps or areas for improvement including training, systems, and pharmacy staff.
- Secure a regular supply of essential drugs for HIV care including OI management and prevention.
- Start to identify and access funding sources after leadership is identified and the site model of care has started to be developed.

- Receive assistance in development or expansion of logistics QA.

**Stage 2:
Service
Delivery
Planning**

Stage 2: Service Delivery Planning

These sites have a leader with some vision and interest in ARVs, but with HIV/AIDS capacity and experience limited perhaps to only HIV primary care and possibly PMTCT. They are making efforts to expand services through linkages and staff training.

Sites at this stage need assistance in program design and implementation in a number of areas. These are ideal sites to replicate models proven to be effective in similar settings. These sites might be considered for follow-up of patients on ARVs as a first step with capacity to initiate ART in the future.

Sites may need—

Leadership

- Seek assistance with design of program, including defining vision and goals, management plans, identification of space, definition of model, staffing plan, and site spectrum of care.
- Develop linkages with other in-country or regional sites already providing ART, if possible.

Protocols and Management

- Begin to identify and adopt protocols for eligibility, regimens, initiation, clinical and lab monitoring monitoring and follow-up, adherence, management of side effects, treatment interruption, and treatment failure.
- Seek technical assistance in development or improvement in HMIS system including patient tracking, medical records, and charting.
- Seek assistance in developing program indicators and appropriate system for M&E of HIV care including ARV treatment that reflects the site's resources and capacity.

Services

- Begin to identify and adopt operational procedures for HIV care, ARV use, and selection of ARV drug products.
- Coordinate programs with referral system to ensure follow-up and continuum of care.
- Identify critical areas need immediate expansion to reach the next level (i.e., VCT, OI treatment, etc.).

Human Resource Capacity

- Expand and/or train staff resources in one or more areas to meet at least minimum essential staff for prescribing, follow-up, and adherence.

Lab

- Seek assistance in maintaining reliable access to lab services, whether on-site or referral, training, supplies, and expansion, as required by adopted site protocols.

Drug Management and Procurement

- Obtain assistance with improving policies and procedures for supply chain management and addressing identified gaps or areas for improvement, including training, systems, and pharmacy staff.
- Seek assistance in starting to identify and access funding sources for ARVs.
- Seek assistance in securing essential drugs for HIV care including OI management and prevention.
- Seek assistance in developing or expanding QA for monitoring ART and other product availability.

**Stage 3:
Preparation**
Stage 3: Preparation

Sites with this score have a vision and a leader committed to the introduction of ART and are on the verge of beginning to prepare for introducing ART. They have demonstrated initiative or quality performance in some areas of HIV care (OI, PMTCT), but are missing some components. These sites require more capacity building and funding, but they have potential to start ARV therapy in a matter of three to nine months if resources are available to address needs.

Sites may need—

Leadership

- Better defined goals and vision and more incorporated into day-to-day activities and future plans.
- Seek assistance with design of program, including definition of model, staffing plan, and site spectrum of care.

Protocols and Management

- Identify and adopt protocols for eligibility, regimens, initiation, clinical and lab monitoring monitoring and follow-up, adherence, management of side effects, treatment interruption, and treatment failure.
- Seek technical assistance in development or improvement in MIS system including patient tracking, medical records, and charting.
- Seek assistance in developing program indicators and appropriate system for M&E of HIV care including ARV treatment that reflects the site's resources and capacity.

Services

- Seek assistance with identification of space.
- Expand scope of services to meet requirements as defined by chosen model of care and linkages to other organizations to meet other needs.

Human Resource Capacity

- Expand and/or train staff resources in one or more areas to meet at least minimum essential staff for prescribing, follow-up, and adherence.

Lab

- Seek assistance in maintaining reliable access to lab services, training and supplies, and expansion, as required by adopted site protocols.

Drug Management and Procurement

- Seek assistance with improving policies and procedures for supply chain management and addressing identified gaps or areas for improvement.
- Seek assistance in identifying and securing resources and ART procurement sources.
- Seek assistance in procuring ART and ensuring access to other essential drugs for HIV care.
- Seek assistance in developing or expanding QA for monitoring ART and other product availability.

**Stage 4:
Action**

Stage 4: Action

Sites in this stage are nearly ready or have already started ARV therapy (usually on a smaller scale), but need assistance in one or more critical areas or a number of supportive areas. Efforts are aimed at improving/ensuring rational and safe use of ART and associated services while planning or continuing introduction of ART. Pilot/model sites should work to move to Stage 5 to be able to serve as resources for scale-out, but other sites (ex., later phase, extremely resource limited, more isolated), may stay at Stage 4 for a longer period of time.

Sites may need—

Leadership

- Better defined goals and vision and be more incorporated into day-to-day activities and future plans.
- Seek assistance in estimating needs, problem solving, and program planning.
- Seek assistance in long term planning.

Protocols and Management

- Seek assistance in developing or formalizing written protocols for eligibility, regimens, initiation, clinical and lab monitoring and follow-up, adherence, management of side effects, treatment interruption, and treatment failure.
- Seek assistance in establishing appropriate operational procedures that reflect site resources and capacity.
- Seek assistance in developing program indicators and appropriate system for M&E that reflect the site's resources and capacity.

Services

- May need a formal plan for initiation or expansion of ARVs at the site.
- Seek assistance in identifying confidential space or other areas, as needed, to reflect increased services.
- Seek assistance in expanding scope or capacity of limited number of services through additional resources, hiring or cross-training, or creation of linkages with other organizations to fill gaps.

Human Resource Capacity

- Further training for additional support staff, plans for additional hiring, or assistance with linkages to other organizations to supply other needed services that may be required.

Lab

- Seek assistance in maintaining reliable access to lab services, training, and supplies.
- Seek assistance in identifying additional monitoring as determined by protocol (ex., CD4 cell counts).

Drug Management and Procurement

- Seek assistance in supply chain logistics to address identified gaps.
- Seek assistance in identifying and securing additional resources for ARV procurement.
- Seek assistance in procurement of ARVs and additional essential drugs for HIV care including OI prevention and treatment.
- Seek assistance in developing or expanding QA for monitoring ARV and other product availability.

**Stage 5:
Support,
Maintenance,
Expansion,
and Serving as
Resource****Stage 5: Support, Maintenance, Expansion, and Serving as Resource**

These sites are already operational and working well, but they may require assistance in maintaining or expanding current efforts (scale-up). They may also serve as training sites for other organizations in other stages, or may serve as models, or may provide technical assistance for replication at other sites locally or elsewhere (scale-out). Some ART sites will not achieve this stage, particularly if they are part of scale-out and in more remote areas.

Sites at this stage may need help to meet completely or improve some of these criteria, but most efforts will be maintaining or expanding capacity, on-going education (patients and providers), training of site and staff to serve as resources for other sites and disseminate lessons learned, and work to identify additional resources for expansion. In addition, efforts need to be made to evaluate programs and protocols through continuous quality improvement (CQI). Finally, training and assistance in long-term planning for programs may be needed.

Stage of Readiness Scoring Sheet

Site:

Evaluators:

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader		
Model of Care		
PMTCT/ART Protocols		
Domain Score		

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART		
Comprehensive Services		
Physical Space		
Community Involvement		
Domain Score		

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System		
Program Monitoring and Evaluation		
Domain Score		

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing		
Experience		
Management, Training, and Retention		
Domain Score		

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability		
Quality Standards		
Domain Score		

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain		
Pharmacy Management		
Financial Resources for Procurement of Drugs and Consumables		
Domain Score		

	PMTCT	ART
Overall Program Score		
Stage of Readiness		

Annex B

Public and Private Sector Facilities Visited

Public Sector and Private Sector Facilities Visited

Region	SITE
Arusha	Selian Lutheran Hospital (FBO)
Dar es Salaam	Amana Municipal Hospital
	Kigamboni Health Centre
	Magomeni Health Centre
	Mbagala Dispensary
	Mnazi Mmoja Health Centre
	Mwananyamala Municipal Hospital
	Sinza Health Centre
	Tabata Dispensary
	Temeke Municipal Hospital
	Muhumbili Referral Hospital -Maternity Ward
	Muhimbili /Harvard Research Clinic
Private Hospital	Shree Hindu Mandal Hospital
Employer-based	Tanzania Breweries Limited
Employer-based	Tanzania Railways Corporation
	PASADA - Pastoral Activities and Services for People with AIDS (FBO)
Iringa	Iringa Regional Hospital
	Ipogoro Health Centre
	Ngome Health Centre
Kagera	Kagera Regional Hospital (Bukoba)
	Murgwanza District Designated Hospital
Kilimanjaro	Kilimanjaro Christian Medical Center (Referral Hospital)
	Mawenzi Regional Hospital
	Majengo Health Centre
	Pasua Health Center
	Rombo District Designated Hospital (Huruma District)
Employer-based	Tanganyika Planting Company
Mbeya	Vwawa District Hospital
	Mbeya Referral Hospital
Mtwara	Ligula Regional Hospital
	Likombe Dispensary
	Nanguruwe Health Center
Mwanza	Bugando Referral Hospital
Tabora	Kitete Regional Hospital
	Isevy Dispensary
	Kakola Dispensary
	Tumbi Dispensary
	Town Clinic Dispensary
	Upuge Health Centre
	Sikonge District Designated Hospital (FBO)
Tanga	Muheza District Designated Hospital (FBO)
Dodoma	The Village of Hope (FBO)
	Mvumi District Hospital

Annex C

List of Stakeholders Interviewed

List of Stakeholders Interviewed

Organization	Name	Title
Ministry of Health	Dr. Gabriel Upunda	Chief Medical Officer
National AIDS Control Programme (NACP)	Dr. Roland Swai	Programme Manager
NACP/STI Control Program	Dr. Mwaita Nyang'anyi	STI Program Coordinator
NACP/VCT Program	Ms. Zébina Msumi	Voluntary Counseling and Social Services Coordinator
NACP/IEC	Ms. Peres Urasa	VCT Officer (AXIOS supported)
Directorate of Hospital Services (DHS)	Dr. Paul Senge	IEC Manager
DHS/Diagnostic Services Unit	Dr. Z. Berege	Director
DHS/Pharmaceutical and Supplies Unit	Dr. Yahya Ipuge	Programme Manager (former PMTCT Coordinator)
DHS/Traditional Medicine Section	Dr. Angela Ramadhani	National PMTCT Coordinator
National TB/Leprosy Program	Mr. Joseph Muhume	Chief Pharmacist
Directorate of Preventive Services (DPS)	Dr. Sabina Mnaliwa	Section Head
Reproductive and Child Health Services (RCHS)	Dr. S. M. Egwaga	Programme Manager
Department of Policy and Planning (DPP)	Dr. Catherine Sanga	Programme Manager
Health Sector Reform Secretariat	Dr. Ahmed Hingora	Programme Coordinator (Health Sector Programme Support)
Department of Policy and Planning (DPP)	Dr. Boudewijn Peters	Chief Technical Advisor (Health Sector Programme Support - DANIDA)
Health Sector Reform Secretariat	Dr. Claude John	HMIS Data Manager (for PMTCT)
Muhimbili University College of Health Sciences	Dr. Stella Chale	Senior Specialist Physician
Muhimbili/Harvard Research Clinic	Dr. Msamanga	Principal Investigator, PMTCT Harvard
	Ms. Balarzeg	Nurse
	Mr. Said Abud	Laboratory Manager
	Mr. Edgar Basheka	Pharmacist
Muhimbili Referral Hospital – Maternity Ward	Sr. Reheima Mawakulete	Acting Chief Matron/PMTCT and VCT Coordinator
	Dr. Humudu	Medical Officer, OB Services
	Ms. Joyce Mwasha	Pharmacist in Charge

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

UNICEF Pilot Sites and Public Sector Sites Selected for PMTCT Expansion	Approximately 110 staff interviewed	See individual Site Stage of Readiness Reports
Tanzania Commission for AIDS (TACAIDS)	Dr. Joseph Temba	National Response Coordinator
Tanzania Food and Drug Authority (TFDA)	Mr. Adelard Mtenga	Senior Drug Quality Control Analyst
Tanzania Food and Nutrition Centre	Ms. Monica Ngonyani	Nutritionist/IECT & Training Development
Medical Stores Department (MSD)	Dr. Jay Drosin	Director General
	Mr. Christopher Msemu	Director of Procurement
	Mr. Per Kronslev	Senior Logistical Advisor
	Mr. Beatus Msoma	Integrated Program Manager
	Mr. Dickson Mwamwembe	Director of Logistics
	Mr. Emmanuel Kimaro	Indent Manager
Donor Agencies		
USAID	John Dunlop	Health/Population/Nutrition Officer (HPNO)
USAID	Liz Loughran	Policy
USAID	Patrick Swai	Public Sector
USAID	Janis Timberlake	AIDS
USAID	Lisa Baldwin	Social Marketing
USAID	Michael Mushi	Public Sector
CDC Tanzania AIDS Project	Ms. Deqa Ali	Senior Program Manager
AXIOS Foundation, Tanzania	Mr. Masauso Nzima	Executive Director
	Dr. Hores Msaky	Program Manager
	Mr. Alpha Adere	Field Service Engineer
Clinton Foundation	Mr. Edward Macharia	Country Representative
DfID	Mr. Paul Smithson	Health and Population Advisor
European Union (EU)	Dr. Stephan Hanson	EU Technical Advisor
German Technical Cooperation (GTZ)	Dr. Brigitte Jordan-Harder	Technical Advisor
Japan International Cooperating Agency (JICA)	Ms. Michiko Tajima	Health Cooperation Planning Advisor
Management Sciences for Health (MSH) Strategy for Enhancing Access to Medicines (SEAM)	Mr. William Mfuko	Senior Technical Advisor

Medicos del Mundo/SPAIN	Dr. Marco Mira	Project Coordinator
Swiss Development Corporation (SDC)	Jacqueline Mahon	Health and Poverty Advisor
UNICEF	Dr. Rosemary Kigadye	Project Officer, Health
	Dr. Souleymane Kamata	
UNAIDS	Ms. Hilda Basstanie	Country Programme Advisor
World Bank, TMAP Project	Dr. Emmanuel Malangalia	Senior Public Health Specialist
World Health Organization (WHO)	Dr. Klint Kunge	National Programme Officer, HIV/AIDS
Private Sector Providers/Employer Based Programs		
Shree Hindul Mandal Hospital	Dr. Kaushik L. Ramaiya	Assistant Medical Officer/Physician Consultant
Private Nurses & Midwives Association (PRINMAT)	Ms. Kezia Kapesa	Executive Secretary
	Ms. Jane Munthali	Chairperson
Tanzania Railways Corporation	Dr. Maguru	Chief Medical Officer
	Ms. Lucy Kamando	Chief Nursing Officer
Tanzania Breweries Limited	Dr. Gugu	Medical Director
Tanganyika Planting Company		
Voluntary Sector NGOs/FBOs		
Anglican Church of Tanzania (ACT)	Dr. Michael Burke	
African Medical and Research Foundation (AMREF)	Ms. Annefreda Kissesa	VCT Programme Manager
Christian Social Services Commission (CSSC)	Dr. Simon Haule	Technical Support Services Officer
	Ms Marsha Maccatta-Yambi	Pharmacist
Pastoral Activities & Services for People with AIDS (PASADA)	Ms. Mary Ash	Executive Director
	Dr Brigid Corrigan	Medical Director
	Dr. Jane Ilahuka	Physician
USPG Anglican Mission (Muheza DDH, Tanga)	Drs. Karilyn & Richard Collins	Program Managers
Selian Lutheran Hospital, Arusha		
Moravian Church (Sikonge DDH, Tabora)	Drs. William & Margaret Hoffman	U.S. support for drug donations
	Ms. Kasonga	VCT/PMTCT Coordinator
	Mr. Hosea	MOH Regional AIDS Control Coordinator
Service Health & Development for People Living Positively with	Mr. Joseph Katto	National Chairperson

Tanzania: Logistics System Capacity and Site Readiness to Expand PMTCT and Initiate ART

HIV/AIDS (SHDEPHA+)			
Tanzania AIDS Society	Mr. Fred Mhalu		
TZ Development and AIDS Prevention Trust (TADEPA)	Dr. Jonathon Stephen		Physician
Kagera Regional Hospital (Bukoba)			
Pharmaceutical Companies			
Salaama Pharmaceuticals (Cipla Distributor)	Mr. Dipes Shah		Cipla Representative
Glaxo Wellcome R&D/ SmithKline Beecham Pharmaceuticals	Mr. Mike Murray		General Manager
Phillips Distributors Limited	Mr. John Nkane		Company Pharmacist
	Ms. Dorothy Matoyo		Pharmacist, HIV Product Specialist (Merck, Sharp & Dome)

Annex D

Stage of Readiness Scoring Sheets

Stage of Readiness Scoring Sheet

Site: Mawenzi Regional Hospital/ Kilimanjaro Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	2	2
Model of Care	1	1
PMTCT/ART Protocols	2	2
Domain Score	1.7	1.7

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2	2
Comprehensive Services	2	2
Physical Space	2	2
Community Involvement	1.5	1.5
Domain Score	1.9	1.9

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	1	1
Experience	1	1
Management, Training, and Retention	1	1
Domain Score	1	1

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	2	1
Quality Standards	2	2
Domain Score	2	1.5

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	2.5	2.5
Pharmacy Management	2	2
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	1.8	1.8

	PMTCT	ART
Overall Program Score	10	9
Stage of Readiness	2	2

Stage of Readiness Scoring Sheet

Site: Rombo District Designated Hospital/ Huruma Town/ Kilimanjaro Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	3	3
Model of Care	3	3
PMTCT/ART Protocols	2	2
Domain Score	2.7	2.7

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2	2
Comprehensive Services	3	3
Physical Space	2.5	2.5
Community Involvement	3	3
Domain Score	2.6	2.6

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	2
Experience	2	2
Management, Training, and Retention	1.5	1.5
Domain Score	1.8	1.8

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	2.5	2.5
Quality Standards	3.5	3.5
Domain Score	3	3

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3	3
Pharmacy Management	2.5	2.5
Financial Resources for Procurement of Drugs and Consumables	1.5	1.5
Domain Score	2.3	2.3

	PMTCT	ART
Overall Program Score	14	14
Stage of Readiness	3	3

Stage of Readiness Scoring Sheet

Site: Kilimanjaro Christian Medical Center (KCMC)/ Moshi/ Kilimanjaro Region

Evaluators: Barry Chovitz, Abdourahmane Diallo, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	5	4
Model of Care	5	3
PMTCT/ART Protocols	5	3
Domain Score	5	3.3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	5	3.5
Comprehensive Services	4	4
Physical Space	5	3
Community Involvement	3	3
Domain Score	4.2	3.4

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4	4
Program Monitoring and Evaluation	2	2
Domain Score	3	3

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	4	3
Experience	5	3
Management, Training, and Retention	3	3
Domain Score	4	3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	5	5
Quality Standards	5	5
Domain Score	5	5

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3	3
Pharmacy Management	2.5	2.5
Financial Resources for Procurement of Drugs and Consumables	4	4
Domain Score	3.2	3.2

	PMTCT	ART
Overall Program Score	24	21
Stage of Readiness	4	4

Stage of Readiness Scoring Sheet

Site: Pasua Health Center/ Kilimanjaro Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	2	2
Model of Care	1	1
PMTCT/ART Protocols	5	2
Domain Score	2.7	1.7
Domain 2: Services and Clinical Care		
PMTCT/ART	5	2
Comprehensive Services	4	3
Physical Space	2	2
Community Involvement	2	2
Domain Score	3.2	2.2
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	3.5	1
Domain Score	2.8	1.5
Domain 4: Staffing and Experience		
Staffing	4	1
Experience	4	1
Management, Training, and Retention	1	1
Domain Score	3	1
Domain 5: Lab Capacity		
Testing Capability	2	1
Quality Standards	1	1
Domain Score	1.5	1
Domain 6: Drug Management and Procurement		
Supply Chain	3	1.5
Pharmacy Management	2	2
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	2	1.5
Overall Program Score		
	15	9
Stage of Readiness		
	3	2

Stage of Readiness Scoring Sheet

Site: Majengo Health Center/ Kilimanjaro Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1	1
Model of Care	1	1
PMTCT/ART Protocols	4.5	2
Domain Score	2.2	1.3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	3	2
Comprehensive Services	2.5	2.5
Physical Space	4	2
Community Involvement	1	1
Domain Score	2.6	1.9

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	3.5	2
Domain Score	2.8	2

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	1
Experience	4	1
Management, Training, and Retention	1	1
Domain Score	2.3	1

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	3	1
Quality Standards	1	1
Domain Score	2	1

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3	2
Pharmacy Management	2	2
Financial Resources for Procurement of Drugs and Consumables	3	1
Domain Score	2.7	1.7

	PMTCT	ART
Overall Program Score	15	9
Stage of Readiness	3	2

Stage of Readiness Scoring Sheet

Site: Kagera Regional Hospital / Kagera Region

Evaluators: Marilyn Noguera, Tanvi Pandit, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	5	3
Model of Care	5	2
PMTCT/ART Protocols	5	3
Domain Score	5	2.6

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	5	2
Comprehensive Services	5	3.5
Physical Space	5	2
Community Involvement	3.5	3.5
Domain Score	4.6	2.7

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	5	3
Program Monitoring and Evaluation	5	2
Domain Score	5	2.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	5	2
Experience	5	1
Management, Training, and Retention	5	1
Domain Score	5	1.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	5	2
Quality Standards	5	2
Domain Score	5	2

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4	3
Pharmacy Management	2	3
Financial Resources for Procurement of Drugs and Consumables	5	1
Domain Score	3.6	2.3

	PMTCT	ART
Overall Program Score	28	13.4
Stage of Readiness	5	2

Stage of Readiness Scoring Sheet

Site: Bugando Referral Hospital / Mwanza Region

Evaluators: Marilyn Noguera, Tanvi Pandit, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	5	2.5
Model of Care	3	1
PMTCT/ART Protocols	5	3
Domain Score	4.3	1.8

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	4.5	2.5
Comprehensive Services	5	4
Physical Space	4	1
Community Involvement	1	1
Domain Score	3.6	2.1

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	5	3
Program Monitoring and Evaluation	1	1
Domain Score	3.0	2.0

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2.5	2
Experience	5	2.5
Management, Training, and Retention	N/A	N/A
Domain Score	3.8	2.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	5	5
Quality Standards	5	3
Domain Score	5.0	4.0

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4	3
Pharmacy Management	3	3
Financial Resources for Procurement of Drugs and Consumables	5	1
Domain Score	4.0	2.3

	PMTCT	ART
Overall Program Score	23.7	14.5
Stage of Readiness	4	3

Stage of Readiness Scoring Sheet

Site: Ligula Regional Hospital / Mtwara Region

Evaluators: Marilyn Noguera, Tanvi Pandit, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1	1
Model of Care	1	1
PMTCT/ART Protocols	2	1
Domain Score	1.3	1
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	3	3
Physical Space	2	1
Community Involvement	1	1
Domain Score	1.75	1.5
Domain 3: Management and Evaluation		
Health Management Info System	2	1
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1
Domain 4: Staffing and Experience		
Staffing	2.5	1
Experience	2	1
Management, Training, and Retention	1.5	1.5
Domain Score	2	1.2
Domain 5: Lab Capacity		
Testing Capability	3	3
Quality Standards	3.5	3.5
Domain Score	3.2	3.2
Domain 6: Drug Management and Procurement		
Supply Chain	2	2
Pharmacy Management	2	1
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	1.6	1.3
Overall Program Score		
	11	9
Stage of Readiness		
	2	2

Stage of Readiness Scoring Sheet

Site: Nanguruwe Health Center / Mtwara Region

Evaluators: Marilyn Noguera, Tanvi Pandit, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	2	2
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1.3	1.3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	1	1
Physical Space	5	5
Community Involvement	2	2
Domain Score	2.2	2.2

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	1	1
Program Monitoring and Evaluation	1	1
Domain Score	1	1

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	1	1
Experience	1	1
Management, Training, and Retention	1	1
Domain Score	1	1

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	1	1
Domain Score	1	1

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3	3
Pharmacy Management	3	2
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	2.3	2.3

	PMTCT	ART
Overall Program Score	9	9
Stage of Readiness	2	2

Stage of Readiness Scoring Sheet

Site: Likombe Dispensary / Mtwara Region

Evaluators: Marilyn Noguera, Tanvi Pandit, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1	1
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1	1
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	1	1
Physical Space	3	3
Community Involvement	1	1
Domain Score	1.5	1.5
Domain 3: Management and Evaluation		
Health Management Info System	1	1
Program Monitoring and Evaluation	1	1
Domain Score	1	1
Domain 4: Staffing and Experience		
Staffing	1	1
Experience	1	1
Management, Training, and Retention	2	2
Domain Score	1.3	1.3
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	1	1
Domain Score	1	1
Domain 6: Drug Management and Procurement		
Supply Chain	1	1
Pharmacy Management	1	1
Financial Resources for Procurement of Drugs and Consumables	1.5	1.5
Domain Score	1.5	1.2
Overall Program Score		
	7	7
Stage of Readiness		
	1	1

Stage of Readiness Scoring Sheet

Site: Kitete Regional Hospital/ Tabora Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	2	2
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1.3	1.3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	2	2
Physical Space	2	2
Community Involvement	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	2
Experience	2	2
Management, Training, and Retention	1	1
Domain Score	1.7	1.7

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	4	4
Quality Standards	3	3
Domain Score	3.5	3.5

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	2	2
Pharmacy Management	2	2
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	1.7	1.7

	PMTCT	ART
Overall Program Score	11	11
Stage of Readiness	2	2

Stage of Readiness Scoring Sheet

Site: Isevy Dispensary/ Tabora Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1	1
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1	1
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	1	1
Physical Space	3	3
Community Involvement	1	1
Domain Score	1.5	1.5
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1.5
Domain 4: Staffing and Experience		
Staffing	3	3
Experience	1	1
Management, Training, and Retention	1	1
Domain Score	1.2	1.2
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	1	1
Domain Score	1	1
Domain 6: Drug Management and Procurement		
Supply Chain	1	1
Pharmacy Management	1	1
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	1	1
Overall Program Score		
	7.2	7.2
Stage of Readiness		
	1	1

Stage of Readiness Scoring Sheet

Site: Kiloleni Dispensary/ Tabora Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1	1
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1	1

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	1	1
Physical Space	2	2
Community Involvement	1	1
Domain Score	1.2	1.2

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	2
Experience	1	1
Management, Training, and Retention	1	1
Domain Score	1.3	1.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	1	1
Domain Score	1	1

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	1	1
Pharmacy Management	1	1
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	1	1

	PMTCT	ART
Overall Program Score	7	7
Stage of Readiness	1	1

Stage of Readiness Scoring Sheet

Site: Town Clinic Dispensary/ Tabora Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1	1
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1	1

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	1	1
Physical Space	2	2
Community Involvement	1	1
Domain Score	1.2	1.2

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	2
Experience	1	1
Management, Training, and Retention	1	1
Domain Score	1.3	1.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	1	1
Domain Score	1	1

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	1	1
Pharmacy Management	1	1
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	1	1

	PMTCT	ART
Overall Program Score	7	7
Stage of Readiness	1	1

Stage of Readiness Scoring Sheet

Site: Sikonge District Designated Hospital/ FBO/ Tabora Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	3	3
Model of Care	3	3
PMTCT/ART Protocols	3	3
Domain Score	3	3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2	2
Comprehensive Services	4	4
Physical Space	3	3
Community Involvement	3	3
Domain Score	3	3

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4	4
Program Monitoring and Evaluation	3	3
Domain Score	3.5	3.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	4	4
Experience	2	2
Management, Training, and Retention	4	4
Domain Score	3.3	3.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	1	1
Domain Score	1	1

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3	3
Pharmacy Management	2	2
Financial Resources for Procurement of Drugs and Consumables	3	3
Domain Score	2.7	2.7

	PMTCT	ART
Overall Program Score	16.5	16.5
Stage of Readiness	3	3

Stage of Readiness Scoring Sheet

Site: Upuge Health Center/ Tabora Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	2	2
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1.3	1.3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	1	1
Physical Space	3	3
Community Involvement	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	2
Experience	1	1
Management, Training, and Retention	1	1
Domain Score	1.3	1.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	1	1
Domain Score	1	1

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	2	2
Pharmacy Management	2	2
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	1.7	1.7

	PMTCT	ART
Overall Program Score	8.4	8.4
Stage of Readiness	1	1

Stage of Readiness Scoring Sheet

Site: Tumbi Dispensary/ Tabora Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1	1
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1	1

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	1	1
Physical Space	2	2
Community Involvement	1	1
Domain Score	1.2	1.2

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2
Program Monitoring and Evaluation	1	1
Domain Score	1.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	1	1
Experience	1	1
Management, Training, and Retention	1	1
Domain Score	1	1

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	1	1
Domain Score	1	1

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	2	2
Pharmacy Management	2	2
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	1.7	1.7

	PMTCT	ART
Overall Program Score	7.5	7.5
Stage of Readiness	1	1

Stage of Readiness Scoring Sheet

Site: Selian Lutheran Hospital, Arusha Region

Evaluators: Abdourahmane Diallo, Barry Chovitz, Gerald Massuki

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	5	5
Model of Care	5	5
PMTCT/ART Protocols	5	5
Domain Score	5	5
Domain 2: Services and Clinical Care		
PMTCT/ART	5	5
Comprehensive Services	5	5
Physical Space	4	4
Community Involvement	5	5
Domain Score	4.8	4.8
Domain 3: Management and Evaluation		
Health Management Info System	5	5
Program Monitoring and Evaluation	4	4
Domain Score	4.5	4.5
Domain 4: Staffing and Experience		
Staffing	5	5
Experience	4	4
Management, Training, and Retention	5	5
Domain Score	4.7	4.7
Domain 5: Lab Capacity		
Testing Capability	4	4
Quality Standards	4	4
Domain Score	4	4
Domain 6: Drug Management and Procurement		
Supply Chain	3	3
Pharmacy Management	3.5	3.5
Financial Resources for Procurement of Drugs and Consumables	4	4
Domain Score	3.5	3.5
Overall Program Score		
	26.5	26.5
Stage of Readiness		
	5	5

Stage of Readiness Scoring Sheet

Site: Magomeni Health Centre, Dar es Salaam

Evaluators: Chris Shaw, Claudia Allers, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	3.0	2.0
Model of Care	4.0	1.0
PMTCT/ART Protocols	3.5	1.5
Domain Score	2.6	1.5

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	4.0	1.0
Comprehensive Services	3.5	1.5
Physical Space	4.0	1.0
Community Involvement	5.0	2.5
Domain Score	4.1	1.5

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4.0	2.5
Program Monitoring and Evaluation	3.0	2.0
Domain Score	3.5	2.3

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	3.0	2.0
Experience	4.0	1.0
Management, Training, and Retention	4.0	1.0
Domain Score	3.7	1.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	2.0	1.0
Quality Standards	2.0	1.0
Domain Score	2.0	1.0

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3.0	3.0
Pharmacy Management	2.0	2.0
Financial Resources for Procurement of Drugs and Consumables	1.0	1.0
Domain Score	2.0	2.0

	PMTCT	ART
Overall Program Score	17.9	9.6
Stage of Readiness	3	2

Stages of Readiness Scoring Sheet

Site: Mnazi Moja Health Centre, Dar es Salaam

Evaluators: Chris Shaw, Tanvi Pandit, Claudia Allers, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1.0	1.0
Model of Care	1.0	2.5
PMTCT/ART Protocols	2.0	1.0
Domain Score	1.3	1.5

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2.0	1.0
Comprehensive Services	2.0	1.0
Physical Space	1.0	1.0
Community Involvement	2.0	2.0
Domain Score	1.8	1.3

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	1.5	1.0
Program Monitoring and Evaluation	1.0	1.0
Domain Score	1.3	1.0

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2.0	1.0
Experience	2.0	1.0
Management, Training, and Retention	2.0	1.5
Domain Score	2.0	1.2

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	2.0	1.0
Quality Standards	2.0	1.0
Domain Score	2.0	1.0

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3.0	3.0
Pharmacy Management	3.0	3.0
Financial Resources for Procurement of Drugs and Consumables	2.0	1.5
Domain Score	2.7	2.5

	PMTCT	ART
Overall Program Score	11.8	8.5
Stage of Readiness	2.0	2.0

Stage of Readiness Scoring Sheet

Site: Sinza Health Centre, Dar es Salaam

Evaluators: Claudia Allers, Tanvi Pandit, Chris Shaw

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	2	N/A
Model of Care	1	
PMTCT/ART Protocols	1	
Domain Score	1.3	

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	1	
Comprehensive Services	1	
Physical Space	1	
Community Involvement	2	
Domain Score	1.3	

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	1	
Program Monitoring and Evaluation	1	
Domain Score	1	

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	
Experience	1	
Management, Training, and Retention	1	
Domain Score	1.3	

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1.0	
Quality Standards	1.0	
Domain Score	1.0	

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3.0	
Pharmacy Management	2.5	
Financial Resources for Procurement of Drugs and Consumables	1.0	
Domain Score	2.2	

	PMTCT	ART
Overall Program Score	8.1	N/A
Stage of Readiness	2.0	N/A

Stage of Readiness Scoring Sheet

Site: Amana Municipal Hospital, Dar es Salaam

Evaluators: Marilyn Noguera, Tanvi Pandit, Abdourahmane Diallo

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	3	3
Model of Care	1	1
PMTCT/ART Protocols	3	3
Domain Score	2.3	2.3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	3	2
Comprehensive Services	3.5	3.5
Physical Space	4	3
Community Involvement	1	1
Domain Score	2.9	2.4

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	3	3
Program Monitoring and Evaluation	2	2
Domain Score	2.5	2.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	4	3
Experience	4	3
Management, Training, and Retention	3	3
Domain Score	3.7	3.0

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	4	4
Quality Standards	4	3.5
Domain Score	4.0	3.8

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4	4
Pharmacy Management	2	2
Financial Resources for Procurement of Drugs and Consumables	1	1
Domain Score	2.3	2.3

	PMTCT	ART
Overall Program Score	17.7	16.3
Stage of Readiness	3	3

Stage of Readiness Scoring Sheet

Site: Mwananyamala Municipal Hospital, Kinondoni Municipality, Dar es Salaam

Evaluators: Marilyn Noguera and Christopher Shaw

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	4	2
Model of Care	4	1.5
PMTCT/ART Protocols	4	1
Domain Score	4	1.5

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	4	2
Comprehensive Services	4	2
Physical Space	2	2
Community Involvement	1	1
Domain Score	2.75	1.75

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4	2
Program Monitoring and Evaluation	1	1
Domain Score	2.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	1.5	2
Experience	3	1
Management, Training, and Retention	1	1
Domain Score	1.8	1.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	4	4
Quality Standards	4	4
Domain Score	4	4

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	1	3.5
Pharmacy Management	3	3
Financial Resources for Procurement of Drugs and Consumables	2	2
Domain Score	2	2.8

	PMTCT	ART
Overall Program Score	17	12
Stage of Readiness	3	2

Stage of Readiness Scoring Sheet

Site: Kigamboni Health Centre, Dar es Salaam

Evaluators: Marilyn Noguera, Tanvi Pandit

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	4	
Model of Care	2.5	
PMTCT/ART Protocols	1	
Domain Score	2.5	
Domain 2: Services and Clinical Care		
PMTCT/ART	1	
Comprehensive Services	4	
Physical Space	3	
Community Involvement	4	
Domain Score	3	
Domain 3: Management and Evaluation		
Health Management Info System	2	
Program Monitoring and Evaluation	1	
Domain Score	1.5	
Domain 4: Staffing and Experience		
Staffing	3	
Experience	3	
Management, Training, and Retention	3	
Domain Score	3	
Domain 5: Lab Capacity		
Testing Capability	4	
Quality Standards	3	
Domain Score	3.5	
Domain 6: Drug Management and Procurement		
Supply Chain	4	
Pharmacy Management	2.5	
Financial Resources for Procurement of Drugs and Consumables	3.5	
Domain Score	3.3	
Overall Program Score		
	16.8	
Stage of Readiness		
	3	

Stage of Readiness Scoring Sheet

Site: Muhimbili Referral Hospital.- Maternity Ward, Dar es Salaam

Evaluators: Claudia Allers, Tanvi Pandit, Christopher Shaw, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	5	3
Model of Care	5	4
PMTCT/ART Protocols	5	3
Domain Score	5	3.3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	4.5	3.5
Comprehensive Services	4.5	4.0
Physical Space	5.0	3.0
Community Involvement	2.0	2.0
Domain Score	4.0	3.1

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4.0	2.5
Program Monitoring and Evaluation	3.0	3.0
Domain Score	3.5	2.8

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	3.5	3.0
Experience	5.0	3.0
Management, Training, and Retention	4.5	3.0
Domain Score	4.3	3.0

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability		
Quality Standards		
Domain Score	N/A	N/A

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4.0	3.0
Pharmacy Management	4.0	3.0
Financial Resources for Procurement of Drugs and Consumables	4.0	3.0
Domain Score	4.0	3.0

	PMTCT	ART
Overall Program Score	20.8	15.2
Stage of Readiness	4.0	3.0

Stage of Readiness Scoring Sheet

Site: Mbagala Health Centre, Dar es Salaam

Evaluators: Marilyn Noguera, Christopher Shaw, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	1	1
Model of Care	1	1
PMTCT/ART Protocols	1	1
Domain Score	1	1

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	1	1
Comprehensive Services	1	1
Physical Space	1	1
Community Involvement	1	1
Domain Score	1	1

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	1	1
Program Monitoring and Evaluation	1	1
Domain Score	1	1

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	1.5	1
Experience	1.5	1
Management, Training, and Retention	1.5	1
Domain Score	1.5	1

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1	1
Quality Standards	N/A	N/A
Domain Score	1	1

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	1.5	1.5
Pharmacy Management	1.5	1.5
Financial Resources for Procurement of Drugs and Consumables	1.0	1.0
Domain Score	1.3	1.3

	PMTCT	ART
Overall Program Score	6.3	6.3
Stage of Readiness	1	1

Stage of Readiness Scoring Sheet

Site: Tabata Dispensary, Dar es Salaam

Evaluators: Marilyn Noguera and Sultan Mlandula (not assessed for ART)

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	3	
Model of Care	2	
PMTCT/ART Protocols	2	
Domain Score	2.3	

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2	
Comprehensive Services	2.5	
Physical Space	3	
Community Involvement	2	
Domain Score	2.4	

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	
Program Monitoring and Evaluation	1	
Domain Score	1.5	

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	
Experience	2	
Management, Training, and Retention	2	
Domain Score	2	

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1	
Quality Standards	N/A	
Domain Score	1	

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3	
Pharmacy Management	2.5	
Financial Resources for Procurement of Drugs and Consumables	2	
Domain Score	2.5	

	PMTCT	ART
Overall Program Score	11.7	
Stage of Readiness	2	

Stage of Readiness Scoring Sheet

Site: Temeke Municipal Hospital, Dar es Salaam

Evaluators: Marilyn Noguera, Christopher Shaw, Sultan Mlandula

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	2	2.0
Model of Care	2	1.5
PMTCT/ART Protocols	2	1.0
Domain Score	2	1.5

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2	2.0
Comprehensive Services	2	2.0
Physical Space	1.5	1.5
Community Involvement	2	4.0
Domain Score	2	2.4

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	2	2.0
Program Monitoring and Evaluation	1	1.0
Domain Score	1.5	1.5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2	2.0
Experience	2	1.0
Management, Training, and Retention	1	1.0
Domain Score	1.8	2.0

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	3	2.0
Quality Standards	2	2.0
Domain Score	2.5	2.0

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4	3.0
Pharmacy Management	3	3.0
Financial Resources for Procurement of Drugs and Consumables	3	2.0
Domain Score	3.3	2.7

	PMTCT	ART
Overall Program Score	12	12.1
Stage of Readiness	2	2

Stages of Readiness Scoring Sheet

Site: Mbeya Referral Hospital, Mbeya Region

Evaluators: Chris Shaw, Claudia Allers, Dr. Paul Senge

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	4.0	3.5
Model of Care	5.0	2.0
PMTCT/ART Protocols	5.0	2.0
Domain Score	4.7	2.5

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	4.5	2.0
Comprehensive Services	4.0	3.5
Physical Space	4.5	2.5
Community Involvement	2.0	1.0
Domain Score	3.8	2.3

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4.5	2.5
Program Monitoring and Evaluation	3.5	2.0
Domain Score	4.0	2.3

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	4.0	1.5
Experience	4.0	1.0
Management, Training, and Retention	4.0	1.0
Domain Score	4.0	1.2

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	3.0	2.5
Quality Standards	3.0	3.0
Domain Score	3.0	2.3

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4.5	2.0
Pharmacy Management	4.0	3.0
Financial Resources for Procurement of Drugs and Consumables	3.5	1.0
Domain Score	4.0	2.0

	PMTCT	ART
Overall Program Score	23.5	12.6
Stage of Readiness	4	2

Stage of Readiness Scoring Sheet

Site: Vwawa District Hospital, Mbozi District, Mbeya Region

Evaluators: Claudia Allers, Christopher Shaw, Dr. Paul Senge

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	4.0	2.5
Model of Care	4.0	2.0
PMTCT/ART Protocols	4.0	2.0
Domain Score	4.0	2.1

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	4.5	2.0
Comprehensive Services	4.0	2.5
Physical Space	3.5	1.0
Community Involvement	2.0	2.0
Domain Score	3.5	1.9

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	5.0	2.0
Program Monitoring and Evaluation	3.0	2.0
Domain Score	4.0	2.0

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	5.0	2.0
Experience	5.0	1.5
Management, Training, and Retention	4.5	1.0
Domain Score	4.8	1.5

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	5.0	2.0
Quality Standards	2.0	2.0
Domain Score	3.5	2.0

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4.0	3.0
Pharmacy Management	2.0	2.0
Financial Resources for Procurement of Drugs and Consumables	4.5	1.0
Domain Score	3.5	2.0

	PMTCT	ART
Overall Program Score	23.3	11.5
Stage of Readiness	4	2

Stage of Readiness Scoring Sheet

Site: Iringa Regional Hospital, Iringa Region

Evaluators: Christopher Shaw, Claudia Allers, Dr. Paul Senge

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	3.0	2.0
Model of Care	2.5	2.0
PMTCT/ART Protocols	3.0	2.0
Domain Score	2.8	2.0

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2.0	2.0
Comprehensive Services	2.0	3.0
Physical Space	2.5	2.5
Community Involvement	2.0	2.5
Domain Score	2.1	2.5

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4.0	3.0
Program Monitoring and Evaluation	3.0	2.5
Domain Score	3.5	2.8

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2.0	2.0
Experience	2.0	1.5
Management, Training, and Retention	1.5	1.0
Domain Score	1.8	1.5

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	3.0	3.0
Quality Standards	3.5	3.5
Domain Score	3.3	3.3

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	2.5	2.5
Pharmacy Management	3.0	2.0
Financial Resources for Procurement of Drugs and Consumables	2.5	2.5
Domain Score	2.7	2.3

	PMTCT	ART
Overall Program Score	16.2	14.4
Stage of Readiness	3.0	3.0

Stage of Readiness Scoring Sheet

Site: Ipogoro Health Centre, Iringa Region

Evaluators: Christopher Shaw, Claudia Allers, Dr. Paul Senge

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	2.5	2.0
Model of Care	2.0	1.0
PMTCT/ART Protocols	2.0	2.0
Domain	2.1	1.7
Score		

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2.0	1.5
Comprehensive Services	1.5	1.5
Physical Space	2.5	2.5
Community Involvement	2.0	2.0
Domain Score	2.0	1.8

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	3.0	2.0
Program Monitoring and Evaluation	3.0	2.0
Domain Score	3.0	2.0

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2.5	2.0
Experience	2.0	1.0
Management, Training, and Retention	1.0	1.0
Domain Score	1.8	1.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1.5	1.5
Quality Standards	2.0	2.0
Domain Score	1.8	1.8

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	2.0	2.0
Pharmacy Management	2.0	2.0
Financial Resources for Procurement of Drugs and Consumables	3.0	1.0
Domain Score	2.3	1.7

	PMTCT	ART
Overall Program Score	13.0	10.3
Stage of Readiness	2	2

Stage of Readiness Scoring Sheet

Site: Ngome Health Centre, Iringa Region

Evaluators: Christopher Shaw, Claudia Allers, Dr. Paul Senge

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	3.0	2.0
Model of Care	3.0	1.5
PMTCT/ART Protocols	2.0	1.0
Domain Score	2.6	1.5

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2.0	2.0
Comprehensive Services	1.5	1.5
Physical Space	3.0	3.0
Community Involvement	1.0	1.0
Domain Score	1.9	1.9

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4.0	2.0
Program Monitoring and Evaluation	2.0	2.0
Domain Score	3.0	2.0

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	2.5	2.0
Experience	2.0	1.0
Management, Training, and Retention	1.0	1.0
Domain Score	1.8	1.3

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	1.0	1.0
Quality Standards	2.5	2.5
Domain Score	1.7	1.7

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	3.0	3.0
Pharmacy Management	2.5	2.5
Financial Resources for Procurement of Drugs and Consumables	3.0	2.0
Domain Score	2.8	2.5

	PMTCT	ART
Overall Program Score	13.8	10.9
Stage of Readiness	3	2

Stage of Readiness Scoring Sheet

Site: Murgwanza District Designated Hospital, Kagera Region

Evaluators: Michael Burke, Anglican Church of Tanzania

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	4	
Model of Care	4	
PMTCT/ART Protocols	2	
Domain Score	3.3	

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2	
Comprehensive Services	3	
Physical Space	4	
Community Involvement	4	
Domain Score	3.3	

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4	
Program Monitoring and Evaluation	2	
Domain Score	3	

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	3	
Experience	3	
Management, Training, and Retention	4	
Domain Score	3.3	

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	3	
Quality Standards	4	
Domain Score	3.5	

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4	
Pharmacy Management	3	
Financial Resources for Procurement of Drugs and Consumables	3	
Domain Score	3.3	

	PMTCT	ART
Overall Program Score	19.7	
Stage of Readiness	4.0	

Stage of Readiness Scoring Sheet

Site: Mvumi District Hospital, Dodoma Region

Evaluators: Michael Burke, Anglican Church of Tanzania

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	4	4
Model of Care	4	4
PMTCT/ART Protocols	4	4
Domain Score	4	4

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	2	2
Comprehensive Services	3	3
Physical Space	4	4
Community Involvement	4	4
Domain Score	3.25	3.25

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4	4
Program Monitoring and Evaluation	4	4
Domain Score	4	4

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	4	4
Experience	3	3
Management, Training, and Retention	4	4
Domain Score	3.7	3.7

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	4	4
Quality Standards	4	4
Domain Score	4	4

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4	4
Pharmacy Management	4	4
Financial Resources for Procurement of Drugs and Consumables	3	3
Domain Score	3.7	3.7

	PMTCT	ART
Overall Program Score	22.7	22.7
Stage of Readiness	4.0	4.0

Stage of Readiness Scoring Sheet

Site: The Village of Hope, Dodoma Region

Evaluators: Michael Burke, Anglican Church of Tanzania

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	4	5
Model of Care	5	5
PMTCT/ART Protocols	5	5
Domain Score	5	5

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	4	4
Comprehensive Services	3.5	3.5
Physical Space	5	5
Community Involvement	4	4
Domain Score	4	4

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	5	5
Program Monitoring and Evaluation	5	5
Domain Score	5	5

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	4	4
Experience	4	4
Management, Training, and Retention	3	3
Domain Score	4	4

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	4	4
Quality Standards	3	3
Domain Score	3.5	3.5

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4	4
Pharmacy Management	4	4
Financial Resources for Procurement of Drugs and Consumables	4	4
Domain Score	4	4

	PMTCT	ART
Overall Program Score	25.5	25.5
Stage of Readiness	5	5

Stage of Readiness Scoring Sheet

Site: Muheza District Designated Hospital, Tanga Region

Evaluators: Dr. Karilyn and Dr. Richard Collins, Anglican Mission

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader	4	4
Model of Care	5	5
PMTCT/ART Protocols	4	4
Domain Score	4.3	4.3

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART	4	4
Comprehensive Services	4.5	4.5
Physical Space	5	5
Community Involvement	4.5	4.5
Domain Score	4.5	4.5

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System	4	4
Program Monitoring and Evaluation	3.5	3.5
Domain Score	3.8	3.8

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing	4	4
Experience	4.5	4.5
Management, Training, and Retention	3.5	3.5
Domain Score	4	4

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability	4.5	4.5
Quality Standards	5	5
Domain Score	4.8	4.8

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain	4	4
Pharmacy Management	3	3
Financial Resources for Procurement of Drugs and Consumables	3.5	3.5
Domain Score	3.5	3.5

	PMTCT	ART
Overall Program Score	24.9	24.9
Stage of Readiness	4.0	4.0

Stage of Readiness Scoring Sheet

Site: PASADA (FBO), Dar es Salaam

Evaluators: Dr. Brigid Corrigan, Medical Director

	PMTCT	ART
Domain 1: Leadership and Program Model		
Leader		4.0
Model of Care		4.0
PMTCT/ART Protocols		4.0
Domain Score		4.0

	PMTCT	ART
Domain 2: Services and Clinical Care		
PMTCT/ART		4.0
Comprehensive Services		4.0
Physical Space		4.0
Community Involvement		4.0
Domain Score		4.0

	PMTCT	ART
Domain 3: Management and Evaluation		
Health Management Info System		4.0
Program Monitoring and Evaluation		4.0
Domain Score		4.0

	PMTCT	ART
Domain 4: Staffing and Experience		
Staffing		4.0
Experience		4.0
Management, Training, and Retention		4.0
Domain Score		4.0

	PMTCT	ART
Domain 5: Lab Capacity		
Testing Capability		3.5
Quality Standards		3.5
Domain Score		3.5

	PMTCT	ART
Domain 6: Drug Management and Procurement		
Supply Chain		4.0
Pharmacy Management		4.0
Financial Resources for Procurement of Drugs and Consumables		4.0
Domain Score		4.0

	PMTCT	ART
Overall Program Score		23.5
Stage of Readiness		4.0

Annex E
Registered Antiretrovirals
as of 10 July 2003—Tanzania

Registered Antiretrovirals as of 10 July 2003—Tanzania

S/N	Product Name	Dosage Form	Generic Name	Strength	Manufacturer	MFG Country
1	Videx	Tablets	Didanosine	100mg	Bristol Myers Squibb	France
2	Epivir	Tablets	Lamivudine	150mg	Glaxo Wellcome Research and Development	United Kingdom
3	Epivir	Oral Solution	Lamivudine	10mg/ml	Glaxo Wellcome Research and Development	United Kingdom
4	Zerit	Capsules	Stavudine	15mg	Bristol Myers Squibb	France
5	Zerit	Capsules	Stavudine	20mg	Bristol Myers Squibb	France
6	Zerit	Capsules	Stavudine	40mg	Bristol Myers Squibb	France
7	Viracept	Tablets	Nelfinavir	250mg	F. Hoffman-La Roche Ltd	Switzerland
8	Invirase	Capsules	Saquinavir	200mg	F. Hoffman-La Roche Ltd	Switzerland
9	Retrovir	Syrup	Zidovudine	50mg/5ml	Glaxo Wellcome Research and Development	United Kingdom
10	Retrovir	Capsules	Zidovudine	100mg	SmithKline Beecham Pharmaceuticals	United Kingdom
11	Combivir	Tablets	Lamivudine +	150mg	Glaxo Wellcome Research and Development	United Kingdom
			Zidovudine	300mg		
12	Viramune	Tablets	Nevirapine	200mg	Boehringer Ingelheim Pharma KG	Germany
13	Viramune	Suspension	Nevirapine	50mg/5ml	Roxane Laboratories Inc.	USA
14	Crixivan	Capsules	Indinavir	200mg	Merck, Sharp & Dome	USA
15	Crixivan	Capsules	Indinavir	400mg	Merck, Sharp & Dome	USA
16	Stocrin	Capsules	Efavirenz	200mg	Dupont Merck Pharmaceuticals Company Ltd	USA
17	Stocrin	Capsules	Efavirenz	100mg	Dupont Merck Pharmaceuticals Company Ltd	USA
18	Stocrin	Capsules	Efavirenz	50mg	Dupont Merck Pharmaceuticals Company Ltd	USA
19	Hivid FC	Tablets	Zalcitabine	0.75mg	F. Hoffman-La Roche Ltd	Switzerland
20	Ziagen	Solution	Abacavir	200mg/ml	Glaxo Wellcome Research and Development	United Kingdom
21	Ziagen	Tablets	Abacavir	300mg	Glaxo Wellcome Research and Development	United Kingdom
22	Duovir	Tablets	Lamivudine +	150mg	Cipla Limited	India
			Zidovudine	300mg		
23	Zidovir	Capsules	Zidovudine	100mg	Cipla Limited	India
24	Lamivir	Tablets	Lamivudine	150mg	Cipla Limited	India
25	Zidovir	Capsules	Zidovudine	300mg	Cipla Limited	India

Registered Antiretrovirals as of 10 July 2003 (continued)

S/N	Product Name	Dosage Form	Generic Name	Strength	Manufacturer	MFG Country
26	Nevimune	Tablets	Nevirapine	200mg	Cipla Limited	India
27	Kaletra Soft	Capsules	Lopinavir + Ritonavir	133.3mg 33.3mg	RP Scherer Limited	United Kingdom
28	Kaletra	Oral Solution	Lopinavir + Ritonavir	80mg/ml 20mg/ml	Abbott Laboratories S.A. (PTY) Ltd	South Africa
29	Norvir Sec	Capsules	Ritonavir	100mg	R.P. Scherer North America	USA
30	Stavex	Tablets	Stavudine	30mg	Aurobindo Pharma Limited Unit III Formulations	India
31	Lamivox	Tablets	Lamivudine	150mg	Aurobindo Pharma Limited Unit III Formulations	India
32	Nevirex	Tablets	Nevirapine	200mg	Aurobindo Pharma Limited Unit III Formulations	India
33	Zidovex L	Tablets	Lamivudine + Zidovudine	150mg 300mg	Aurobindo Pharma Limited Unit III Formulations	India
34	Indivex	Capsules	Indinavir	400mg	Aurobindo Pharma Limited Unit III Formulations	India
35	Stavex	Capsules	Stavudine	40mg	Aurobindo Pharma Limited	India
36	Trizir	Tablets	Abacavir + Zidovudine + Lamivudine	300mg 300mg 150mg	Glaxo Wellcome Operations (UK) Limited	United Kingdom
37	Indivan	Capsules	Indinavir	400mg	Cipla Limited	India
38	Triomune	Tablets	Lamivudine + Stavudine + Nevirapine	150mg 30mg 200mg	Cipla Limited	India
39	Triomune	Tablets	Lamivudine + Stavudine + Nevirapine	150mg 40mg 200mg	Cipla Limited	India
40	Efavir	Capsules	Efavirenz	200mg	Cipla Limited	India
41	Nelvir	Tablets	Nelfinavir	250mg	Cipla Limited	India
42	Divir	Tablets	Didanosine	200mg	Cipla Limited	India
43	Lamivir	Oral Solution	Lamivudine	50mg/5ml	Cipla Limited	India
44	Zidovir	Oral Solution	Zidovudine	50mg/5ml	Cipla Limited	India
45	Divir	Tablets	Didanosine	100mg	Cipla Limited	India

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