

Republic of Zambia Ministry of Health

AID\$ Response Fast Track Strategy 2015-2020



National HIV/AID\$/\$TD/TB Council of Zambia

Table of Content

| Acronyms | |
|--|------------------------------|
| Foreword | 5 |
| Acknowledgement | 6 |
| Executive Summary | 7 |
| BACKGROUND | 8 |
| SITUATIONAL ANALYSIS | |
| People living with HIV | Error! Bookmark not defined. |
| People living with HIV who know their status | |
| Linkage to Care and Treatment Services | 19 |
| People living with HIV on ART | 19 |
| Retention on Antiretroviral Therapy | 21 |
| People living with HIV on ART virologically suppressed | |
| Viral Load Testing | |
| Logistics and Supply Chain Management System | |
| Leadership and Governance | 23 |
| GOAL, OBJECTIVES AND TARGETS | 25 |
| PRINCIPLES OF FAST TRACK | |
| FAST TRACK INTERVENTIONS | 27 |
| People living with HIV | |
| People living with HIV who know their status | Error! Bookmark not defined. |
| Linkage to Care and Treatment Services | Error! Bookmark not defined. |
| People living with HIV on ART | 29 |
| Retention on Antiretroviral Therapy | Error! Bookmark not defined. |
| People living with HIV on ART virologically suppressed | Error! Bookmark not defined. |
| Viral Load Testing | 29 |
| Logistics and Supply Chain Management System | 29 |
| Leadership and Governance | Error! Bookmark not defined. |
| MONITORING AND EVALUATION | |
| PROGRAMME MANAGEMENT AND RESOURCE MOBILIZATION | |
| ANNEX | |

| Acronyms | |
|----------|---|
| ACT | Accelerating Children's HIV/AIDS Treatment Initiative |
| AIDS | Acquired Immune Deficiency Syndrome |
| ANC | Antenatal care |
| ART | Antiretroviral therapy |
| ARV | Antiretroviral drugs |
| AIDS | Acquired Immune Deficiency Syndrome |
| AGEP | Adolescent Girls Empowerment Program |
| AGYW | Adolescent girls and young women |
| ANC | Antenatal care |
| ARVs | Antiretroviral drugs |
| ART | Antiretroviral therapy |
| BU | Boston University |
| CDC | Centers for Disease Control and Prevention |
| CHA | Community Health Assistant |
| CHAZ | Churches Health Association of Zambia |
| CHAI | Clinton Health Access Initiative |
| CIDRZ | Centre for Infectious Disease Research in Zambia |
| CSE | Comprehensive Sexuality Education |
| CBVs | Community based volunteers |
| CDC | Centers for Disease Control and Prevention |
| DBS | Dried Blood Spots |
| DFID | Department for International Development |
| DHIS | District Health Information System |
| DMO | District Medical Office |
| DNA | Deoxyribonucleic acid |
| DREAMS | Determined, resilient, empowered, AIDS-free, mentored, and safe |
| EIMC | Early Infant Male Circumcision |
| eMTCT | Elimination of Mother-to-Child Transmission of HIV |
| EID | Early Infant Diagnosis of HIV |
| EPI | Expanded Programme for Immunisation |
| FBOs | Faith-based Organisations |
| FDC | Fixed Dose Combination |
| FP | Family Planning |
| GBV | Gender based violence |
| GF | Global Fund |
| GRZ | Government of the Republic of Zambia |
| HAART | Highly Active Antiretroviral Therapy |
| HCWs | Healthcare workers |
| HEIs | HIV exposed infants |
| HIA2 | Health Information Aggregate report |
| HIV | Human Immunodeficiency Virus |
| HMIS | Health Management Information System |
| HTC | HIV Testing and Counselling |
| HTS | HIV testing services |
| HMIS | Health Information Management System |
| HTC | HIV Testing and Counselling |

| IEC | Information advantion and communication |
|------------|---|
| IMCI | Information, education and communication |
| | Integrated Management of Childhood Illness |
| IPD | In-patient department |
| M&E | Monitoring and Evaluation |
| MCH MCP | Maternal and Child Health |
| МоН | Multiple and concurrent sexual partnerships Ministry of Health |
| MoT | Modes of HIV Transmission |
| MC | Male circumcision |
| MCH | Maternal and Child Health |
| MCP | Multiple Concurrent Partnerships |
| MDGs | Millennium Development Goals |
| MIPs | Mother-infant pairs |
| MNCH | Maternal, Newborn and Child Health |
| MTCT | Mother-to-Child Transmission of HIV |
| мон | Ministry of Health |
| MSL | Medical Stores Limited |
| NAC | National AIDS Council |
| NASF | National HIV/AIDS Strategic Framework |
| OPD | Out-patient department |
| OVCs | Orphans and vulnerable children |
| PHC | Primary Health Care |
| PITC | Provider-initiated Testing and Counselling |
| PLHIV | People living with HIV |
| PMTCT | Prevention of Mother-to-Child Transmission of HIV |
| PCR | Polymerase Chain Reaction |
| PEPFAR | U.S. President's Emergency Plan for AIDS Relief |
| PITC | Provider Initiated Testing and Counselling |
| PLWH | People Living with HIV PMTCT Prevention of Mother-to-Child Transmission of HIV |
| PMO | Provincial Medical Office |
| PMTCT | HIV prevention of mother-to-child transmission |
| PopART | Population Effects of Antiretroviral Therapy to Reduce HIV Transmission |
| PNC | Postnatal care |
| STI | Sexually Transmitted Infections |
| ТВ | Tuberculosis |
| SCMS | Supply Chain Management System |
| SDGs | Sustainable Development Goals |
| SRH | Sexual and Reproductive Health |
| STI | Sexually Transmitted Infections |
| TAT | Turn-around time |
| TWG | Technical Working Group |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNICEF | United Nations Children's Fund |
| UNDP | United Nations Development Programme |
| UNFPA | United Nations Population Fund |
| | • |

| UNODC USAID | United Nations Office for Drug Control United States Agency for International Development |
|----------------|--|
| USG | United States Government |
| VMMC | Voluntary Medical Male Circumcision |
| WHO | World Health Organisation |
| ZDHS | Zambia Demographic and Health Survey |

Foreword

After the adoption of the 90x90x90 targets by 2020, the UNAIDS Regional Office for East and Southern Africa convened a country consultation in May 2014. The consultation was backed up by calls by the UNAIDS Programme Coordinating Board (PCB) for new targets which would drive progress, take into account new scientific advances and build on the post MDG AIDS response momentum. Furthermore, the new targets provide a platform for mutual accountability and a clear demonstration that AIDS is a winnable challenge.

Although Zambia fully subscribed to the Fast Track as a global Initiative, a conscious decision was made to articulate a country specific Roadmap. Developed through a series of technical consultations, the Zambia Fast Track Roadmap presents strategies for a departure from business as usual approach in programme implementation, 90x90x90 annualised targets at national and sub-national levels, and indicative financial implications.

To Fast-Track the AIDS response will certainly require extensive mobilization of human, institutional and financial resources. Through strategic collaboration with stakeholders and cooperating partners, support will be required for investment planning and critical analysis of national and subnational approaches to fast-track progress towards 2020 targets.

Implementation of this Roadmap will benefit from multi-sectoral partnerships across all stakeholders. I look forward to having this Roadmap as a reference document as we embark on this critical journey towards the end of AIDS by 2030.

Acknowledgement

The development of the Zambia Fast Track Roadmap benefited a lot from input of a multi-sectoral technical team under the coordination of the National AIDS Council. Specific mention goes to Dr. Jabbin Mulwanda, former NAC Director General for overall leadership to ensure that Zambia has a country domesticated roadmap. Also acknowledged are the contributions of Mr. John Mwale and Dr. Virginia Walubita from the NAC Secretariat.

Thanks also go to members of the technical committee who reviewed several drafts of the document and sourced the data with which to enrich the roadmap. Special recognition goes to Dr. Crispin Moyo, Dr. Wezi Kaonga, Dr. Bushimbwa Tambatamba, Dr. Lea Namonje, Dr. Kebby Musokotwane, Dr. Nyange and Ms. Veronica Muntanga from the Ministry of Health. The HMIS data team comprising Mr. Patrick Amanzi, Mr. Boniface Mwanza and Mr. Peter Funsani deserve a special mention as well.

From the Civil Society Constituency, appreciation goes to Ms. Julie Baratita from ZINGO, Mr. Ngwale (Disability Sector), Ms. Kunyima Banda (NZP+) and Mr. Felix Mwanza (TALC). The CSO voice was always a constant reminder to ensure that behind the numbers, there were real human faces.

The Roadmap also benefited a great deal from cooperating partner inputs. In this regard, special acknowledgements go to: Dr. Cynthia Bowa (USAID), Ms. Annie Mwila (CDC), Dr. Prisca Kasonde (FHI360), Mr. Rick Olson (UNICEF), Dr. Lastone Chitembo (WHO) and Ms. Lindsey Hehman Soares (CHAI).

Finally, appreciation go to the UNAIDS Zambia Office for both the technical and financial support that made the Roadmap a reality. Specifically, special appreciations go to Dr. Medhin Tsehaiu and Mr. Henry Damisoni.

It is our sincere hope and belief that the Roadmap will go a long way towards actualizing the Fast Tracking of the AIDS response in Zambia.

Executive Summary

The Zambia Fast Track Roadmap presents a detailed epidemiological situation analysis of the HIV epidemic and the responses todate, highlights opportunities and challenges for actualization of the Fast Track, highlights critical considerations for the Fast Track such as leadership, sustainable financing and innovative approaches to monitoring and evaluation. In addition, the Roadmap presents strategies for enhancing timely achievement of the Fast Track targets, treatment cascades at national and subnational levels, annualised Fast Track targets and resource needs estimates.

It is worth pointing out that despite this being the first issue; the Roadmap provides concrete guidance on the fast Track. However, as new programmatic data are being generated and analysed, there will be need to review and revise the Roadmap to make it more of a living document. Suffice to say that Zambia will achieve the Fast Track Targets before 2020 on the overall. However, this raises issues of equity as we strive to make sure that no one who is supposed to be a beneficiary of the Fast Track Initiative is left behind.

Under the business as usual scenario the following provinces will achieve their Fast Track treatment targets much later after 2020: Copperbelt – 2021, Luapula - 2026, Northern 2035, North Western – 2022, Southern – 2023 and Western – 2022. Therefore, these provinces are encouraged to take a critical look at the proposed strategies and see which ones can be adopted in the short and medium term to facilitate achievement of the 2020 targets.

Finally, it is important to acknowledge the bold steps and normative guidance documents that have recently been launched by the Ministry of Health all of which have a direct bearing on the achievement of the Fast Track targets. These include: Consolidated Guidelines for Treatment and Prevention of HIV Infection, HTS Guidelines, Adolescent Guidelines and Viral Implementation Guidelines. Adoption of "Test and Start" will go a long way towards the Fast Track. It is in this regard that special appeals are being made to translate the normative guidance on paper to action on the ground with speed to actualize the 2020 targets.

BACKGROUND

According to the 2013-14 Zambia Demographic and Health Survey (ZDHS), human immunodeficiency virus (HIV) prevalence for adults aged 15 – 49 years is estimated at 13.3%. The prevalence is higher among females (15.1%) compared to males (11.3%). The prevalence ranges from a low of 6.4% in Muchinga province to a high of 18.2% in Copperbelt province. Higher prevalence rates are in the provinces of Copperbelt (18.2%), Lusaka (16.3%), Western (15.4%), Southern (12.8%, and Central (12.5%). Prevalence is lowest in Muchinga (6%), North-Western (7.2%) and Eastern (9.3%). The estimated mortality rate from acquired immune deficiency syndrome (AIDS) in adults aged 15 years and older has decreased from a peak of 8% in 2002 to 2.1% in 2013. As the antiretroviral therapy (ART) programme is scaled up, HIV-related mortality is expected to decline. Currently, survival and retention of people on ART at 12 months has increased from 65% in 2010 to 81% in 2013.

Knowledge of HIV and its prevention is widespread. More men than women know about HIV prevention (men 83% vs 79% women): using condoms, limited sex with a single partner, etc. The proportion of women and men with knowledge of HIV prevention methods increases with age, with youth aged 15-19 having the lowest level of knowledge. Knowledge of various prevention methods generally increases with increasing education and wealth. Among those with no education, however, 75% of women and 85% of men know about using condoms; while 86% of women and 93% of men know about limiting the number of sexual partners. Among the poorest (lowest quintile) 79% of women and 82% of men know about condoms, and 90% of women and 94% of men know about limiting sexual partners. Similarly, 68% of the poorest women and 72% of those with no education know that a person cannot become infected by sharing food with a person who has AIDS. Comparable figures for men are 77% and 68%.

Almost all women and men age 15-49 (97% and 96%, respectively) know a place where they can get an HIV test. Eighty per cent of women aged 15-49 have been tested for HIV. Only 2% of the women who had been tested for HIV did not receive the test results. Younger women, those who have never been married and never had sex, those with no education, and the poorest are least likely to have been tested. Sixty-four per cent of men age 15-49 have been tested for HIV; 4% did not receive the results. Among the youth aged 15-24 years 94% and 92% of women and men respectively know of a place to get an HIV test. In addition, 2% of the women tested did not receive results compared to 3% for men in the same age-group.

Significant progress has been made in increasing and improving access to and the use of HIV treatment services. Policies, guidelines, and operational standards are in place to ensure a cohesive national approach to treatment services and ensure that Zambia is up-to-date with the latest international standards. In 2015, a total of 879 health facilities were dispensing antiretroviral drugs (ARVs). As of December 2015, the number of children and adults receiving ART in accordance with the nationally approved treatment protocol was 758,646 out of the 1.2 million people estimated to be in need of ART, representing 63%

coverage (HMIS, 2015). ART coverage among children aged O-14 years increased to 51,903, representing about 58% coverage (HMIS, 2015).

The world is embarking on a Fast-Track strategy to end the AIDS epidemic by 2030. To reach this visionary goal after three decades of the most serious epidemic in living memory, countries will need to use the powerful tools available, hold one another accountable for results and make sure that no one is left behind. Without scale-up,

the AIDS epidemic will continue to outrun the response, increasing the long-term need for ART and increasing future costs. Rapid scale-up of essential HIV prevention and treatment approaches will enable the response to outpace the epidemic. To achieve this by 2030, the number of new HIV infections and AIDS-related deaths will need to decline by 90% compared to 2010. There are major benefits of fast-tracking the AIDS response in low- and middle-income countries. Twenty eight million HIV infections will be averted between 2015 and 2030 and 21 million AIDS-related deaths will be averted. The economic return on an investment in the Fast Track Strategy is expected to be 15 times. Twenty four billion United States dollars of additional costs for HIV treatment will be averted.

For Zambia to reach the Fast Track targets, previous successes must be built upon and extended, and those left behind by services must be reached. Recognising this, the Government of the Republic of Zambia (GRZ) Revised National AIDS Strategic Framework (R-NASF) focuses on six priority programmes: 1) Treatment, 2) HIV Testing and Counselling (HTC), 3) Elimination of Mother-to-Child Transmission, 4) Voluntary Medical Male Circumcision (VMMC), 5) Condoms programming, 6) Social and Behaviour Change.

SITUATIONAL ANALYSIS

(a). Epidemiology

HIV Prevalence

Zambia has a mature and generalized HIV epidemic. Just like other countries in the region, HIV transmission is primarily through heterosexual contact. With an estimated adult (15-49) HIV prevalence of 13.3% (ZDHS 2013-14), Zambia is one of the high HIV burden countries in sub-Saharan Africa. Although a gradual decline in HIV prevalence has been noted between 2001-02 (15.6%) and 2013-14 (13.3%), the pace remains slow and HIV prevalence is unacceptably high. Women are disproportionately affected compared to their male counterparts. According to the 2013-14 ZDHS, HIV prevalence among women was estimated at 15.1% compared to 11.3% among men.

Geographical Distribution

National HIV prevalence estimates generally tend to mask geographical variations which are critical for targeting of strategic intervention programmes to ensure maximum impact and that no one is left behind. Although the national prevalence is estimated at 13.3%, there are three provinces with higher HIV prevalence rates than the national estimate – Copperbelt (18.2%), Lusaka (16.3%) and Western (15.4%). See figure 1 below. By residence, HIV prevalence is higher in the urban areas (18.2%) compared to rural areas (9.1%). HIV prevalence by gender shows a similar picture. According to the 2013-14 ZDHS, HIV prevalence among women is estimated at 21% and 9.9% in urban and rural areas compared to 15% and 8.1% respectively for men.



Figure 1: HIV Prevalence by Province

Age Distribution

HIV prevalence is lowest among the 15-19 year-old respondents and peaks in the 40-44 year-old age-groups for both men and women. See figure below. Women continue to be disproportionately affected across all age groups compared to their male counterparts. Some of the factors that predispose women to a higher risk of HIV infection include: cultural norms such as early and forced marriages, age-disparate sexual relationships, gender-based and intimate partner violence and low and inconsistent use of condoms. Overall, HIV prevalence has stabilized, albeit at higher and unacceptable levels for both sexes. Trends for HIV prevalence for the previous surveys show a similar pattern as can be seen in the figure below.





HIV Prevalence among adolescent boys and girls

Adolescents comprise 23 percent of the total Zambian population. The recent HIV

prevalence rates among adolescent girls and boys aged 15-19, which are often used as proxy for new infections¹, are quite similar in Zambia, with 4.8% of airls and 4.1% of boys currently living with HIV. Further disaggregation suggest a rather unique programme context, with HIV prevalence among adolescents boys aged 15-17 being actually higher, at 3.7%, compared to girls at



3.5%. Among adolescents aged 18-19, girls continue to be disproportionately affected by HIV, with a prevalence of 6.6% compared to a prevalence of 4.5% among boys of the same age. Between 2007 and 2014, the prevalence rate among adolescent girls, aged 15-19 declined from 5.7% to 4.8%. Among boys 15-19 there was actually an increase from 3.6% to 4.1% which suggests that Zambia has a rather unique and different risk context for adolescent girls and boys.

The most significant change in adolescent risk reduction behaviour over the 2007-2014 period was the utilization of HTC services, which went from 20% to 50% among adolescent girls and from 11% to 28% among boys aged 15-19. In addition, the ZDHS data strongly suggests the need for a differentiated response around addressing the relative risk of HIV infection among different sub-groups of young people. HIV prevalence among girls aged 15-24 from the poorest households was 4.3% compared to 9.3% among girls from the wealthiest households. Young girls with only primary education had an HIV prevalence of 6.8% compared to 8.3% for girls with some secondary education.

Overall, however, HIV prevalence among adolescents and young adults is unacceptably high and on the increase. See figure below. Most likely this is due to higher rates of new infections as adolescents and young adults start engaging in sexual activity.

¹ The increasing numbers of vertically infected children on treatment transitioning into middle adolescents is slowly reducing the validly of adolescent prevalence as a possible proxy for new infections.



Potential explanations for trends in HIV prevalence

According to the Modes of HIV Transmission study of 2009 the key drivers of the HIV epidemic in Zambia were identified as: low prevalence of HIV testing uptake, low prevalence of medical male circumcision, multiple concurrent sexual partnerships, low prevalence of condom use and labour migration. Despite high, almost universal, AIDS awareness and knowledge levels, these have unfortunately not translated into positive protective behaviours. Comprehensive knowledge of HIV and AIDS among adolescents aged 15-19 has not changed between 2007 and 2013-14 ZDHS and remains significantly low at 40%. Condom use at last sex also remained low at 36% and 43% for adolescent girls and boys respectively.

People Living with HIV

Based on recent estimates and projections from Spectrum, Zambia had 1.2 million people living with HIV in 2015. Holding other factors constant, this figure is expected to increase to 1.3 million by 2020. Out of the 10 provinces, Lusaka, Copperbelt, Southern and Central are the major contributors to the pool of PLHIV in the country. Refer to figure below on trends of PLHIV at national and provincial level. It would be desirable to further disaggregate the PLHV estimates and projections by district to highlight the need for more focused approaches towards unmet need for HIV testing services, ART enrolment and viral load testing. District-level estimates will also facilitate achievement of the Fast Track targets in an equitable manner.



Figure 5: Trend: of PLHIV at national and provincial level (2000-2014)

Pregnant women

The national prevention of mother-to-child transmission (PMTCT) coverage in Zambia for 2014 was estimated at 86% that is a slight drop from 2013 when it was estimated at 92%. Figure 18 illustrates a steady increase in national PMTCT coverage between 2005 and 2013. PMTCT coverage is projected to decline in the near future following the adoption of WHO treatment guidelines which require all HIV positive pregnant women to be put on treatment.



There was a rapid increase in PMTCT coverage between 2007 and 2010, indicating the introduction of ART for PMTCT services, and a change in eligibility criteria to put all HIV positive pregnant women on treatment regardless of CD4 count.

Coverage of PMTCT services vary according to the provinces of Zambia. Central province reports the highest estimated coverage at 100% while Northern reports the least coverage at 60%. Four provinces - Copperbelt, Lusaka, Muchinga, and North-Western have coverage below 80% estimated at 65%, 61%, 57%, and 64% respectively. Table 1 below shows the provincial differences in PMTCT coverage.

| Province | ce Mothers needing PMTCT | | Mothers | Coverage (%) | |
|---------------|--------------------------|--------|---------|-----------------|-----|
| | | | | receiving PMTCT | |
| | Estimate | Low | High | Estimate | 100 |
| Central | 8200 | 7200 | 9200 | 8200 | 100 |
| Copperbelt | 12800 | 11900 | 14100 | 12800 | 65 |
| Eastern | 6700 | 6200 | 7200 | 4300 | 84 |
| Luapula | 5000 | 4500 | 5700 | 4200 | 100 |
| Lusaka | 12200 | 10700 | 13700 | 12200 | 61 |
| Muchinga | 2100 | 1900 | 2200 | 1300 | 57 |
| Northern | 5000 | 4300 | 6000 | 2200 | 81 |
| North-Western | 2800 | 2400 | 3200 | 2800 | 64 |
| Southern | 11300 | 10200 | 12500 | 7300 | 100 |
| Western | 5900 | 5300 | 6700 | 5900 | 100 |
| National | 72 000 | 64 600 | 80 500 | 61 200 | 83 |

 Table 1: Estimated mothers needing and receiving PMTCT services in 2014

Mothers needing and receiving PMTCT

Nationally, need for PMTCT has been increasing steadily, from an estimated 59, 000 in 2005 to 72, 000 in 2014. The estimated need for PMTCT in the provinces is shown in Table 1 above.

Mother to child transmission of HIV at 6 weeks (MTCT)

The effectiveness of the PMTCT programme is reflected on MTCT at six weeks and final rates after breastfeeding at the national and sub-national levels as indicated in Table 2 below.

| Province | MTCT Rates at 6 weeks | MTCT rates including breastfeeding | |
|---------------|-----------------------|---------------------------------------|--|
| Central | 5 | 11 | |
| Copperbelt | 3 | 14 | |
| Eastern | 7 | 19 | |
| Luapula | 6 | 17 | |
| Lusaka | 3 | 7 | |
| Muchinga | 8 | 16 | |
| Northern | 9 | 22 | |
| North-Western | 6 | 18 | |
| Southern | 8 | 16 | |
| Western | 4 | 15 | |
| National | 5 | 14 | |

Table 2: MTCT rates at 6 weeks and after breastfeeding

Nationally, the MTCT rate at 6 weeks is estimated at 5%, with observed regional variations. The MTCT rates are highest in the Northern region at 9%, and least in Lusaka and Copperbelt at 3%. Generally, the rates are relatively high, with only Lusaka, Copperbelt and Western reporting less than a 5% rate.

Trends in MTCT rates at 6 weeks show a sustained decrease over the period 2005 to 2014 in all the regions. Nationally, the MTCT rate at 6 weeks in 2005 was estimated at 15% and declined dramatically to 5% in 2015, about a 67% decrease. The decrease was highest in Lusaka at 77% and least in Northern Province at 48%. Table 2 above shows the decreases over the period in MTCT rates at 6 weeks. MTCT rates after breastfeeding period are estimated to be high with all the provinces reporting a more than 5% with Lusaka having the lowest rate at 7%.

Challenges

- Poor follow-up for repeat HIV testing at the recommended intervals during pregnancy and the breastfeeding period.
- Option B+ roll out and implementation at the health facility level has been gradual and slower than initially planned
- Low percentage of pregnant women who present in the first trimester and low health facility delivery rate
- Low male involvement and low partner testing.
- Low identification of discordant couples.

Children

Across all provinces, new paediatric HIV infections are highest in the Copperbelt and Southern. New infections in children (O-14) are a potential indicator of the PMTCT uptake and effectiveness of regimens. In Lusaka children make up about 7% of the new HIV infections, while in the Eastern province, the proportion is highest, estimated at about 24%. Table 3 below shows the estimated number of new HIV infections for 2014 across the provinces.

| Province | Children living with HIV | New HIV Infection; children | Need for ART in children | Annual AID\$ death\$ Children |
|---------------|--------------------------------|-----------------------------------|-----------------------------|-------------------------------------|
| Central | 11,600 | 900 | 11,700 | 700 |
| Copperbelt | 21,200 | 1,800 | 21,100 | 800 |
| Eastern | 11,000 | 1,300 | 11,000 | 700 |
| Luapula | 7,100 | 900 | 7,200 | 500 |
| Lusaka | 18,800 | 800 | 18,900 | 700 |
| Muchinga | 3,200 | 300 | 3,200 | 100 |
| Northern | 6,800 | 1,100 | 7,000 | 600 |
| North-western | 4,200 | 500 | 4,200 | 200 |
| Southern | 16,000 | 1,800 | 16,200 | 700 |
| Western | 7,400 | 900 | 7,500 | 300 |

Table 3: Estimated burden of HIV in children (0-14)

(b). The HIV and AID\$ Response

PLHIV who know their sero-status

In 2015 Zambia had an estimated 1.2 million PLHIV out of which 758,646 were on treatment. According to the HMIS an additional 233,496 were enrolled in care. The baseline number of PLHIV who know there status is, therefore, estimated as the sum of PLHIV on treatment and those enrolled in care. This comes to 992,342 disaggregated into 211,265 adults (15+) and 22,231 children (0-14).

Linkage to Care and Treatment Services

A total of 233,496 PLHIV (211,265 adults and 22,231 children) were enrolled in care in 2015. As "Test and Start" is implemented to scale, the numbers of PLHIV in care will reduce significantly. Bridging the gap will to a larger extent also depend on increasing the numbers of facilities or sites providing ART services to maximize PLHIVs access to treatment as well as addressing the technical bottlenecks that still persist in initiating PLHIV on treatment. Some of the bottlenecks include:

- Longer prescriptions (stability in commodities
- Community-based treatment delivery
- Decentralisation of ART access to more outlets
- Declaration of PMTCT sites as ART sites
- Adoption of differentiated care models
- HPCZ accreditation processes to be reviewed

PLHIV on ART

Women

The number of women on ART in Zambia increased from 76 in 2002 (less than 2% coverage) to over 400,000 in 2015 (66% coverage). Refer to figure 3 below. Advances that have facilitated rapid scale up of enrolment of women into the ART programme include the adoption and roll out of implementation of PMTCT Option B+ in 2013 and adoption of the 2013 World Health Organisation (WHO) Guidelines into National Consolidated Treatment and Prevention Guidelines in 2013. Unfortunately Option B+ is yet to be rolled out to all parts of the country and literacy levels are very low. Other initiatives that will support speedy scale up in the near future include the Fast Track and further revision of national guidelines to test and start to align with the latest WHO guidelines. The Fast Track targets will help reinvigorate our collective action towards achievement of the first critical milestone to end AIDS as an epidemic by 2030.



Children

The ART programme for children in Zambia dates back to 2005. From 5,400 (5% coverage) children on treatment in 2005 the number has steadily increased to 51,903 (59% coverage) at the end of 2015. Despite adoption of Option B+ and the WHO Guidelines of 2013 scale up of paediatric treatment has remained a challenge for the following reasons among many others: case identification is still sub-optimal, there are weak linkages from testing to care and treatment, not all ART sites are providing paediatric ART and provider confidence or competence are low.

Acknowledging the need to rapidly scale up paediatric treatment the GRZ with support from the United States President's Emergency Plan for AIDS Relief (PEPFAR) and the Children Investment Fund Foundation launched the "Accelerating Children's HIV/AIDS Treatment Initiative" in 2014. Implementation started in the second quarter of 2015 and seeks to double the number of children living with HIV receiving ART by September 2016.

Innovations such as mother-baby pairs at the clinics ensuring that both the mother and the baby receive care in the same facility will certainly increase retention. Most of the mothers who do not give birth at the clinics bring their children for immunization and this provides an innovative way of reaching young children with treatment. In addition, provision of better regimens for children such as DNDI pellets would increase uptake as the current regimens are usually very bitter.

Adolescents

Currently, data for ART in Zambia are not disaggregated by age-group. Only two categories are available \leq 15 for children and 15+ for adults (includes adolescents and young adults). Going forward, there is need to collect detailed data on age that will allow for more detailed analysis to identify sub-groups requiring special attention for the targets to be realized.

Adults

The ART programme in Zambia expanded from a reach of 143 (< 1% coverage) adult PLHIV in 2002 to 706,743 (63% coverage) adults PLHIV at the end of December 2015. The number of sites providing treatment increased to 879 from two specialist facilities in Lusaka and the Copperbelt provinces in the early 2000s.

To facilitate speedy scale up Zambia revised the Treatment Guidelines in 2010 from an ART initiation threshold of CD4 200 to 350. This shift affected the adult ART coverage rate as it dropped from 92% to 84%. In 2013 Zambia adopted the WHO Guidelines that increased the CD4 threshold to 500 while initiating treatment irrespective of CD4 count for all HIV+ pregnant women; children aged 0-14, tuberculosis (TB) patients and sero-discordant couples. The net effect has been further drop in coverage to 63% in 2015.

Funding present a serious potential obstacle to sustained rapid scale-up of the treatment programme. According to the National AIDS Spending Assessment of 2013, over 85% of all HIV funding including treatment in Zambia is from external partners. The World Bank classification of Zambia as a low middle income country in 2011 has further compounded the problem as most of the external partners have had a rethink of their role in the HIV response – resulting into a shift from direct HIV financing or closing shop altogether. Currently, the major external funders are PEPFAR and The Global Fund to Fight AIDS, Tuberculosis and Malaria (GF). The Ministry of Health (MOH) increased its contribution towards procurement of ARVs in the local currency but due to the weaker Kwacha the value has dropped from about \$60 million in 2014 to about \$42 million in 2015.

In view of the above, the need to increase the domestic financing base through Public Private Partnerships and the Social Health Insurance or an AIDS Levy to counter the shocks of unpredictable external financing and sustain the gains realized thus far cannot be overemphasized.

Retention on ART

Data on ART retention in Zambia are very scanty. So far, reliable data come from two sources – one, a cohort study that followed up adult patients in 18 public facilities in Lusaka in 2006.ⁱ The cohort was followed for an average of 6.8 months. The study team recorded a patient retention rate of 71.6% at 6 months. There was no disaggregation by age or sex. The second source is the Global AIDS Response Progress Reporting (GARPR) of 2016 where MOH reported a combined retention for adults and children at 12 months on antiretroviral treatment at 93.1% (11,577 out of 12,430 patients). There is no data on retention at 24, 36,48 and 60 months.

PLHIV on ART virologically suppressed

Overall, there is no programme data on viral suppression for any of the subgroups (women, children, adults, adolescents, etc) that are currently on treatment in the country. However, this is a priority area for the MOH as part and parcel of Zambia's commitment towards successful implementation of the Fast Track Strategy as per High Level Meeting Declaration of 2016. However, patient survival on ART is assumed as a surrogate measure of viral suppression. In this case viral suppression is estimated at a national average of 73%.

Viral Load Testing

Data on viral load testing in Zambia are very scanty. According to the GARPR the country only conducted 35,000 viral load tests in 2015. However, it is worth noting that the majority of those tested are virally suppressed. Efforts to improve viral load testing and infrastructure are ongoing. Currently all 10 provinces have viral load testing machines installed. As part of the Fast Track implementation there is an expectation that provincial disaggregated data will be available so that treatment cascades are produced as a tool for monitoring progress.

According to the Zambia Viral Load Implementation Scale-up Plan (2015-2019), a phased implementation of routine viral load testing has been proposed. The plan proposes 10% viral load testing coverage in 2016 which will ultimately increase to 90% in 2020. The three phases of the scale up plan are:

- i. Phase 1: 10% of patients on ART accessing viral load testing by the end of 2016
- ii. Phase 2: 70% of patients on ART accessing viral load testing by the end of 2018
- iii. Phase 3: 90% of patients on ART accessing viral load testing by the end of 2020.

Logistics and Supply Chain Management System

Logistics and supply chain management in Zambia are guided by the Health Sector Supply Chain Strategy and Implementation Plan (2015-2017)ⁱⁱ. Both the strategy and the plan aspire to provide equitable access to affordable high quality essential medicines and medical supplies to support the country's public health care system. A total of eight focus thematic areas have been highlighted and these are:

- i. Procurement and procurement planning
- ii. Quantification and product selection
- iii. Commodity distribution and waste management
- iv. Information systems, processes and design
- v. Quality assurance and rational use
- vi. Commodity security, financing and resource mobilization
- vii. Performance management, (M&E) and supply chain supervision
- viii. Capacity, human resources, training and facility stores.

For each of these thematic areas there are proposed strategic interventions which are meant to address any anticipated key issues and challenges in the operationalisation of the strategy and plan. Both the strategy and implementation plan are underpinned by the following guiding principles:

- Accountability
- Commodity availability, accessibility and equity
- Coordination
- Efficiency, effectiveness and value for money
- Within the confines of existing laws and policies
- People and community centred
- Public safety
- Sustainability
- Transparency.

(c). Institutional Arrangements and Financing

Leadership and Governance

Leadership and governance are very critical components of the HIV response Fast Track in the health sector. Currently the HIV programme is spread across four Directorates within the MOH and these are: PMTCT under Maternal and Child Health; Laboratory, Adult and Paediatric ART under Clinical Care; Surveillance and Research under Public Health and M&E under Planning. Since all Directors are at the same level none of them can sanction the other for inaction resulting into critical issues falling through the cracks particularly the ones that are inter-departmental in nature.

Apart from internal coordination and governance issues, there is an urgent need to clearly define an effective coordination structure and mechanism for the health sector response to HIV probably where the MOH serves as the secretariat. Not only will this facilitate effective leveraging of strategic partnerships and ensure optimal utilization of the available resources but this will also cut down on wastage through elimination of unnecessary duplications in resource allocation. With the implementation of the devolution of services to the local authorities as per Cabinet Circular 10 of 2014, the need for robust coordination and governance of the HIV response in the health sector cannot be overemphasized.

Coordination

Adoption of the "Three Ones" principle by the MOH can have profound benefits in the overall coordination and governance of the health sector in general and the Fast Track in particular. Such a move will facilitate both private sector and community engagement to be more accountable, visible and productive.

At service delivery level there is need to have integrated policy guidance and corresponding structural arrangements coupled with research and innovation advances that will significantly facilitate reduction of service delivery missed opportunities.

Sustainable Financing

With support from the Gates Foundation, the MOH piloted and adapted a resource mapping and resource utilization tool for use in the country. This is a tool that requires roll out to understand who is doing what, where and with what resources for optimization.

Through the National AIDS Council, about \$1.4 million has been mobilized primarily from the Roads Sector for HIV and Health programmes. Plans are afoot to extend the Environmental Impact Assessments (EIA) to other sectors such as Energy. In addition, through the Alliance of Mayors and Municipal Leaders on HIV/AIDS (AMICALL) a Nakonde Declaration, signed by local councilors endorsed allocation of at least 3-5% of their local resources to support the local HIV response.

Efforts to operationalize the Social Health Insurance Scheme have stalled. This is an excellent platform for public private partnership (PPP) towards financing of HIV/AIDS and health programmes in the country.

(c). The HIV and AID\$ Fast Track Initiative

Goal, Objectives and Targets

To accelerate progress towards ending the epidemic, new Fast-Track Targets have been established in the Joint United Nations Programme on HIV/AIDS strategy 2016-21 and ten bold and ambitious targets have been set as global guidance for countries to adopt and implement. These targets aim to transform the vision of zero new HIV infections, zero discrimination and zero AIDS-related deaths into concrete milestones and end-points. These are to aim for 90% of people living with HIV knowing their HIV status, 90% of people who know their status receiving treatment and 90% of people on HIV treatment having a suppressed viral load so their immune system remains strong and they are no longer infectious by 2020; and to increase to 95% for each target by 2030. These 90–90–90 targets apply to children and to adults, men and women, poor and rich, in all populations—and even higher levels need to be achieved among pregnant women.

Target 1: 90% of people (**children**, **adolescents and adults**) living with HIV know their status, 90% of people living with HIV who know their status are receiving treatment and 90% of people on treatment have suppressed viral loads

Target 2: Zero new HIV infections among **children**, and ensure that their **mothers** are alive and well

Target 3: 90% of **young people** are empowered with the skills, knowledge and capability to protect themselves from HIV

Target 4: 90% of **women** and **men**, especially **young people** and those in highprevalence settings, have access to HIV combination prevention and **sexual and reproductive health services**

Target 5: 27 million additional **men** in high-prevalence settings are **voluntarily medically circumcised**, as part of integrated **sexual and reproductive health services for men**

Target 6: 90% of **key populations**, including sex workers, men who have sex with men, people who inject drugs, transgender people and prisoners, as well as migrants, have access to HIV combination prevention services

Target 7: 90% of **women and girls** live free from gender inequality and gender-based violence to mitigate the risk and impact of HIV

Target 8: 90% of people living with, at risk of and affected by HIV report **no discrimination**, especially in health, education and workplace settings

Target 9: Overall **financial investments** for the AIDS response in low- and middleincome countries reach at least US\$ 30 billion, with continued increase from the current levels of domestic public sources

Target 10: 75% of people living with, at risk of and affected by HIV, who are in need, benefit from HIV-sensitive **social protection**

Principles of Fast Track

- Setting highly ambitious HIV prevention and treatment targets—aiming to reach maximum numbers in the shortest amount of time
- Highly-effective programme interventions in locations and populations with the highest HIV burdens
- Discarding what does not work, adopting new ways of delivering services including community service delivery, fostering innovation and early adoption of new technologies and methods
- HIV service delivery in the intensity and quality needed to reach the ambitious targets within the short time-frame of the next five years
- People centred, zero discrimination

Fast Track Interventions and Proposed Strategies

Intensified Combination HIV Prevention

Achievement of the Fast Track targets will, to a large extent, depend on success with HIV prevention. According to current global guidance optimal spending on HIV prevention is pegged at 25% of the total AIDS spending. Significant drop in new HIV infections will allow for transferring of resources to treatment and other aspects of the AIDS programme.

Proposed Strategy 1: Intensify combination prevention programmes that are known and proven to work (low hanging fruits) for specific target groups and geographical locations

Proposed Strategy 2: Open up new spaces such as roll out of comprehensive sexuality education with the Ministry of General Education, meaningful community engagement and participation through Ministry of Community Development, early and forced marriages with Ministry of Chiefs and Traditional Affairs and male participation with

Ministry of Gender

Proposed Strategy 3: Strategic focus on adolescents and young people using modern technologies and media that they identify with in HIV prevention messaging

Proposed Strategy 4: Reach out to populations most at risk for HIV who tend to be society's most marginalised and hard to reach

Proposed Strategy 5: Integrate health services and advocate with government for supportive policies

The actual Fast Track strategic focus intervention areas under prevention in this regard include:

- Condom programming including lubricants and access to needles and syringes
- VMMC
- HTS
- SBC
- Pre and post-exposure prophylaxis
- Human Rights
- Roll out of prevention services for key populations

HT\$

Identification of HIV-positive individuals to be referred to treatment is one of the critical steps in the cascade for the Fast Track. HIV testing is the entry point to HIV prevention, treatment, care and other support services. Knowledge of the HIV status of is cardinal to the Fast Track and the AIDS response overall. For the past few years Zambia has implemented national Voluntary Counselling and Testing (VCT) campaigns in June. However, due to HIV prevalence differences the successes of these campaigns have been mixed. Approaches that have been used include: door-door, community outreach, clinic-based, VCT and self-testing. Mop-up campaigns for HIV testing have also been conducted around the commemoration of World AIDS Day.

Moving forward, the following strategies are being proposed to maximize the numbers of PLHIV who need to be aware of their sero-status and ultimately be enrolled into treatment. The strategies are disaggregated by facility and community levels.

National overall strategy: Fast track unique identifiers to address multiple HIV testing at facility, community and self-testing

Facility Strategies:

Proposed Strategy 1: Provide universal HTS

- > Target districts with high HIV prevalence
- > Reinforce implementation of the policy on HIV testing by lay counsellors

Proposed Strategy 2: Targeted provider-initiated HTC such as in the Antenatal care (ANC), VMMC, Family Planning. In patient, Out Patient Department, TB, Sexually Transmitted Infections clinic)

Proposed Strategy 3: Integration of HIV testing among other services such as the Expanded Programme on Immunizations for children

Proposed Strategy 4: Target couples for counselling and testing

Proposed Strategy 5: Improve logistics and supply chain management for HIV testing reagents and other laboratory consumables and supplies

Community Strategies

Proposed Strategy 1: Target index cases and their social contacts for follow up **Proposed Strategy 2:** Target sub-populations at high risk of HIV infection eg adolescents, young people, women, fisherfolk, university students, MSM, CSW, IDU, etc

Proposed Strategy 3: Focus on men for HIV testing agenda and drive

Proposed Strategy 4: Utilise traditional and religious leaders to encourage uptake of HTS

Proposed Strategy 5: Provide resources for community support services such as funding for community health worker HTS providers

PLHIV

Pregnant women

The elimination of new HIV infections among children will require very high levels of coverage of ART among pregnant women, exceeding the overall 90–90–90 targets for treatment.

PLHIV who know their status and linkage to treatment services

The revised National Treatment and Prevention Guidelines have adopted a "Test and Start" approach as recommended by WHO. This move will incentivize PLHIV to know their status as treatment will be readily available for commencement. However, the following will have to be intensified to sustain the momentum generated thus far:

| Proposed Strategy 1: Improvement of linkages and referral systems |
|---|
| Proposed Strategy 2: Services integration |
| Proposed Strategy 3: Improved HTS services to be able to identify PLHIV cases |

Viral Load Testing

According to the revised national guidelines all PLHIV on treatment are supposed to be routinely tested for viral load at 6 months after initiation of treatment and at 12 months once they have stabilized through point of care testing for viral load. Patients should be able to access results within 2 weeks of testing. Increase in turn-around time for results should be addressed through increasing the number of testing centres, availability of reagents and other laboratory consumables, reducing testing backlogs and timely maintenance of equipment. To this end the MOH has procured at viral load testing machines for each of the provinces. Installation is almost complete. For maximum benefit, the following is proposed:

Proposed Strategy: Develop a courier system for specimens and results across provinces to enhance optimal utilization of the viral load testing machines. Some of the machines are most likely going to be underutilized.

Logistics and Supply Chain Management System

Logistics and supply chain management systems are central to achievement of the Fast Track targets globally and in Zambia in particular. Once demand for services (HTS, treatment and viral load testing) has been created the required laboratory consumables and ARVs should be readily available for clients to access high quality services with ease. For this to happen there is need for evidence informed quantification and forecasting of the ARV and laboratory consumable supplies to ensure no service interruption which can demotivate potential clients. In this regard, operationalisation of the Regional Stores Hubs by MOH is a step in the right direction towards decentralization of the logistics and supply chain management system.

Proposed Strategy 1: Robust and evidence informed quantification and forecasting for ARVs and laboratory consumables for HIV

Proposed Strategy 2: Capacity improvements in LMS both at the Medical Stores and the Regional Hubs to ensure robust quantification, forecasting and timely distribution of ARVs and laboratory consumables

Leader\$hip

Successful implementation of the Zambia Fast Track Roadmap will require political will across all levels. Given the devolution of services from national to local councils through Cabinet Circular No.: 10 of 2014 the Fast Track will certainly require champions that will be advocates for the cause at the subnational levels. The champions will need to be personalities of high moral standing in society. Potential candidates include – chiefs, politicians and other eminent personalities in society.

At MOH level there is need to review the current structure to effectively coordinate the HIV response and the Fast Track in the health sector.

Proposed Strategy: Recruit eminent Zambians to be champions of the AIDS Fast Track across different levels of the governance.

Proposed Strategy: Restructuring of the MOH so that HIV responsibilities come under a single Directorate to enhance accountability.

M&E

Effective implementation of the Fast Track Roadmap will require a robust M&E system to facilitate tracking of progress towards set targets. Continuous M&E capacity building is a must to ensure understanding of the data used to measure progress. More importantly, the M&E systems need to disaggregate monitoring data appropriately to allow for comprehensive monitoring of all sub-groups in the Fast Track initiative.

Proposed Strategy: Foster integrated M&E systems for HIV and AIDS programmes across stakeholders (harmonisation of indicators, tools, data and sources for monitoring the Fast Track Initiative)

Innovation

Implementation of the Zambia Fast Track Roadmap will require introduction of new ways of thinking or doing business. Among them, some innovative ideas to be explored include:

- Use of the Situation Room to monitor progress as well as an advocacy tool for speedy implementation of the Roadmap
- Explore the use of drones for transportation of samples and results
- Use of mobile phone platforms for SMS to reminder health workers to encourage them to adhere to guidelines and improve case management
- Unique identifiers for HTS and other intervention programmes such as treatment.
- Training of HCWs to be compressed to a day's work in view of the increased knowledge base especially in view of HIV testing where all HCW must participate under the access to universal testing
- Introduce a Statutory Instrument through the MOH to allow HCW to test 15-19 adolescents without consent from parents or guardians

• Increase CD4 testing access through centralized testing while investing in a robust courier system for specimens and results

Programme Management and Resource Mobilisation

Successful Fast Track of the AIDS response in Zambia will certainly require additional financial resources. Currently the major sources of financing are PEPFAR and the GF up to 2017. It is imperative that optimal utilization of the available resources is implemented while the country mobilises additional resources with which to bridge the gap. The resource mobilization drive will focus on several approaches.

First, Zambia will submit a proposal to the GF as the current grant comes to an end in 2017. This is where the country needs to do a comprehensive programmatic and financial gap analysis to ensure complementarity of the GF resources.

In addition, Zambia should also seriously explore the expansion of the domestic financing base. Opportunities in this regard include: the EIA focusing on the Road Sector and yet to be expanded to the Energy and Construction Sectors, Constituency Development Funds, the Social Health Insurance and the Public Private Partnership in general.

In parallel, the resource mobilization efforts will require enactment of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Flexibilities Bill to ensure that Zambia continues to benefit from generic ARVs.

To crown it all analytical studies on optimization should inform management and application of available resources. In this way, unnecessary duplication of resources will be addressed and their application will be in high impact intervention areas that will facilitate achievement of Fast Track targets.

Proposed Strategy 1: Operationalisation of the Social Health Insurance Scheme
Proposed Strategy 2: Roll out of the EIA to other Capital Projects beyond Roads Sector
Proposed Strategy 3: Encourage local councils to invest in the at least 3-5% of their resources in the local AIDS response

Proposed Strategy 4: Invest in studies on maximization of efficiencies and optimization

ANNEX 1: Treatment Cascades
























Annex 2: ART Treatment Scenarios and Targets

As at 31 December 2015, Zambia had 63% of the PLHIV on treatment. The country is on course to achieving the second 90 by 2020. This will be possible due to the contributions from Lusaka (achieved target in 2016), Eastern, Muchinga, Central and Copperbelt provinces that are projected to achieve their fast track targets in 2018, 2019 and 2020 respectively.

The major concern is on viral suppression. In 2015 only 35,000 viral suppression tests were conducted. There is need to redouble efforts to ensure that in 2020 an estimated 1,035,000 PLHIV on treatment will be tested for viral suppression.

Although the national picture looks promising, the following provinces will not be able to achieve the 2020 treatment targets unless they embrace the fast track and do business differently – Luapula, Northern, North Western, Southern and Western. To ensure that no one is left behind in the fast track, it would be desirable to look at district estimates to get a sense of equity in the enrolment into the treatment programme.

National Fast Track Treatment Targets:

2016 : 949,000 2017 : 975,000 2018 : 1,001,000 2019 : 1,027,000 2020 : 1,053,000



The Central province has 65% of all PLHIV on treatment. According to the estimates and projections, the province is expected to achieve the 2020 treatment target by 2019 under "Business as Usual" scenario. The primary concern should be to ensure that PLHIV on treatment in the province have viral suppression tests.

Central Province Treatment Targets

2016 : 99,360 2017 : 102,120 2018 : 106,260 2019 : 109,020



Copperbelt province has 60% of all PLHIV on treatment. Under the business as usual scenario, the province will miss the 2020 treatment target. However, through the Fast Track, the province will meet its target by 2020 as projected. Achievement of PLHIV on treatment reached with viral suppression tests will be a toll order.

Copperbeit Treatment Target

2016 : 196,650 2017 : 205,200 2018 : 213,750 2019 : 222,230 2020 : 230,850



Under the "Business as Usual" Scenario, Eastern province is expected to reach its treatment targets for 2020 in 2018. Further enrolments in the treatment programme will cover for treatment target shortfalls in other provinces like: Northern, Luapula, North Western, Southern and Western where achievement of targets will require strict adherence to Fast Track principles. Beyond 2018, the major preoccupation for Eastern province will be the district ART coverage to ensure equity and that no one is left behind. Modest annual increases in provincial targets are shown below.

Eastern Province Treatment Targets

2016: 81,750 2017: 83,930 2018: 85,020



As can be seen from the graph above, Luapula province will require substantial efforts under the fast track to achieve the treatment targets and viral suppression targets by 2020 projected at 59,130. In the absence of any intervention Luapula province will miss the fast track targets by six years to 2026.

In this case, Luapula province requires innovative approaches to be able to effectively push forward the treatment target from 2026 to 2020. Some of the interventions could be in the areas of innovative HIV Testing Services, human resources and innovative ART service delivery just to mention a few.

Luapula Treatment Targets

2016: 43,800 2017: 47,450 2018: 51,830 2019: 55,480 2020: 59,130



Lusaka province achieved the 81% fast track treatment target for 2020 in 2016. The major areas of primary concern for the province being district coverage and assessment of viral suppression among all PLHIV on treatment. Overall, Lusaka will be a major contributor to national treatment coverage figures.

2016: 240,120 2017: 245,640 2018: 251,160



Muchinga is projected to reach and surpass the treatment target for 2020 under the business as usual scenario by 2018. This is characterized by modest annual increases of less than a thousand to be enrolled into the ART programme. With appropriate district targeting, Muchinga has the potential to achieve the target even earlier.

Muchinga Treatment targets

2016: 23,680 2017: 24,320 2018: 25,280



Under the "Business as Usual" scenario, Northern province will only be able to achieve the 2020 Fast Track target in 2035. The Fast Track will reinvigorate provincial efforts to actualize the targets in a timely manner. However, this will require substantial shifts in business practices to make it happen. District estimates will be very handy to enhance understanding of where to invest more efforts.

Treatment Targets

2016: 59,360 2017: 65,720 2018: 73,140 2019: 79,500 2020: 85,860



The Fast Track provides an incentive for North Western province to achieve its treatment target in 2020, two years earlier instead of 2022 under the "Business as Usual" scenario.

Treatment Targets

2016: 26,650 2017: 28,290 2018: 29,930 2019: 31,570 2020: 33,210



Southern province will have to front-load 3 years from 2023 to be able to meet the Fast Track treatment target by 2020.

Treatment Targets

2016: 104,000 2017: 110,400 2018: 116,800 2019: 123,200 2020:129,600



Two years of front-loading of efforts will be required for the Western province to achieve its 2020 treatment target on schedule.

Treatment Targets

2016: 62,400 2017: 66,240 2018: 70,080 2019: 73,920 2020: 77,760

ⁱ Stringer JS, Zulu I, Levy J, Stringer FM, Mwango A, et. al. (2006). Rapid scale-up of antiretroviral therapy at primary health care sites in Zambia: feasibility and early outcomes. JAMA 296:782-793.

ⁱⁱ Ministry of Health Zambia (2015-2017). Health Sector Supply Chain Strategy and Implementation Plan.

Annex 3: Annual Fast Track Targets

| Year | Estimated PLHIV | Fast Tro | ack Component | |
|------|--------------------|-------------------------------------|---------------|-----------|
| | | Diagnosed HIV+ (Know HIV Status) | Treatment | \$urvival |
| 2015 | 1,200,000 | 992,142 | 758,646 | 553,812 |
| 2016 | 1,220,000 | 1,022,714 | 817,517 | 632,850 |
| 2017 | 1,240,000 | 1,063,285 | 876,388 | 711,887 |
| 2018 | 1,260,000 | 1,098,857 | 935,258 | 790,925 |
| 2019 | 1,280,000 | 1,134,428 | 994,129 | 869,962 |
| 2020 | 1,300,000 | 1,170,000 | 1,053,000 | 949,000 |

National: Annual Fast Track Targets (2015 – 2020)

Central Province: Annual Fast Track Targets (2015 – 2020)

| Year | Estimated PLHIV | Fast Tr | ack Component | |
|------|--------------------|-------------------------------------|---------------|-----------------|
| | | Diagnosed HIV+ (Know HIV Status) | Treatment | \$urvival |
| 2015 | 125,000 | 106,250 | 82,267 | 60,055 |
| 2016 | 127,600 | 109,840 | 89,370 | 64,364 |
| 2017 | 130,200 | 113,430 | 96,472 | 68,673 |
| 2018 | 132,800 | 117,020 | 103,575 | 72,981 |
| 2019 | 135,400 | 120,610 | 110,677 | 77,290 |
| 2020 | 138,000 | 124,200 | 117,780 | 81 <i>,</i> 599 |

| Year | Estimated PLHIV | Fast Track Component | | |
|------|--------------------|---------------------------------|---------|-----------|
| | | Diagnosed HIV+ Treatment Surviv | | \$urvival |
| | | (Know HIV Status) | | |
| 2015 | 261,000 | 197,742 | 158,820 | 115,940 |
| 2016 | 265,800 | 209,494 | 173,226 | 134,362 |
| 2017 | 270,600 | 221,245 | 187,632 | 152,784 |
| 2018 | 275,400 | 232,997 | 202,038 | 171,206 |
| 2019 | 280,200 | 244,748 | 216,444 | 189,628 |
| 2020 | 285,000 | 256,500 | 230,850 | 208,050 |

Copperbelt Province: Annual Fast Track Targets (2015 – 2020)

Eastern Province: Annual Fast Track Targets (2015 – 2020)

| Year | Estimated PLHIV | Fast Track Component | | |
|------|--------------------|----------------------|-----------|-----------|
| | | Diagnosed HIV+ | Treatment | \$urvival |
| | | (Know HIV Status) | | |
| 2015 | 99,000 | 82,255 | 70,353 | 51,358 |
| 2016 | 101,000 | 85,424 | 73,940 | 57,000 |
| 2017 | 103,000 | 88,593 | 77,528 | 62,643 |
| 2018 | 105,000 | 91,762 | 81,115 | 68,285 |
| 2019 | 107,000 | 94,931 | 84,703 | 73,928 |
| 2020 | 109,000 | 98,100 | 88,290 | 79,570 |

| Year | Estimated PLHIV | Fast Track Component | | |
|------|--------------------|----------------------------------|--------|-----------|
| | | Diagnosed HIV+ Treatment Survivo | | \$urvival |
| | | (Know HIV \$tatus) | | |
| 2015 | 65,000 | 57,044 | 29,855 | 21,794 |
| 2016 | 66,600 | 58,775 | 35,710 | 28,093 |
| 2017 | 68,200 | 60,506 | 41,565 | 34,392 |
| 2018 | 69,800 | 62,238 | 47,420 | 40,692 |
| 2019 | 71,400 | 63,969 | 53,275 | 46,991 |
| 2020 | 73,000 | 65,700 | 59,130 | 53,290 |

Luapula Province: Annual Fast Track Targets (2015 – 2020)

Lusaka Province: Annual Fast Track Targets (2015 – 2020)

| Year | Estimated PLHIV | Fast Tr | ack Component | |
|------|--------------------|-----------------------|---------------|------------------|
| | | Diagnosed HIV+ | Treatment | \$urvival |
| | | (Know HIV Status) | | |
| 2015 | 272,000 | 249,271 | 220,461 | 160,937 |
| 2016 | 272,800 | 249,097 | 221,881 | 169,137 |
| 2017 | 273,600 | 248,923 | 222,301 | 177,337 |
| 2018 | 274,400 | 248,748 | 222,720 | 185 <i>,</i> 537 |
| 2019 | 275,200 | 248,574 | 223,140 | 193,737 |
| 2020 | 276,000 | 248,400 | 223,560 | 201,480 |

| Year | Estimated PLHIV | Fast Track Component | | |
|------|--------------------|----------------------|-----------|-----------|
| | | Diagnosed HIV+ | Treatment | \$urvival |
| | | (Know HIV Status) | | |
| 2015 | 29,000 | 24,477 | 20,257 | 14,788 |
| 2016 | 29,200 | 24,982 | 20,906 | 16,210 |
| 2017 | 29,400 | 25,486 | 21,754 | 17,633 |
| 2018 | 29,600 | 25,991 | 22,603 | 19,055 |
| 2019 | 29,800 | 26,495 | 23,451 | 20,478 |
| 2020 | 30,000 | 27,000 | 24,300 | 21,900 |

Muchinga Province: Annual Fast Track Targets (2015 – 2020)

Northern Province: Annual Fast Track Targets (2015 – 2020)

| Year | Estimated PLHIV | Fast Track Component | | |
|------|--------------------|-------------------------------------|-----------|-----------|
| | | Diagnosed HIV+ (Know HIV Status) | Treatment | \$urvival |
| 2015 | 75,000 | 38,860 | 29,852 | 21,792 |
| 2016 | 81,200 | 50,168 | 41,054 | 32,910 |
| 2017 | 87,400 | 61,476 | 52,255 | 44,027 |
| 2018 | 93,600 | 72,784 | 63,457 | 55,145 |
| 2019 | 99,800 | 84,092 | 74,658 | 66,2262 |
| 2020 | 106,000 | 95,400 | 85,860 | 77,380 |

| Year | Estimated PLHIV | Fast Track Component | | |
|------|--------------------|---------------------------------|--------|-----------|
| | | Diagnosed HIV+ Treatment Surviv | | \$urvival |
| | | (Know HIV \$tatus) | | |
| 2015 | 37,000 | 31,708 | 20,051 | 14,637 |
| 2016 | 37,800 | 32,746 | 22,683 | 17,696 |
| 2017 | 38,600 | 33,785 | 25,315 | 20,754 |
| 2018 | 39,400 | 34,823 | 27,946 | 23,813 |
| 2019 | 40,200 | 35,862 | 30,578 | 26,871 |
| 2020 | 41,000 | 36,900 | 33,210 | 29,930 |

North Western Province: Annual Fast Track Targets (2015 – 2020)

Southern Province: Annual Fast Track Targets (2015 – 2020)

| Year | Estimated PLHIV | Fast Track Component | | |
|------|--------------------|-----------------------|-----------|-----------|
| | | Diagnosed HIV+ | Treatment | \$urvival |
| | | (Know HIV Status) | | |
| 2015 | 146,000 | 112,700 | 78,797 | 57,522 |
| 2016 | 148,800 | 118,960 | 88,958 | 69,378 |
| 2017 | 151,600 | 125,220 | 99,118 | 81,233 |
| 2018 | 154,400 | 131,480 | 109,279 | 93,089 |
| 2019 | 157,200 | 137,740 | 119,439 | 104,944 |
| 2020 | 160,000 | 144,000 | 129,600 | 116,800 |

| Year | E\$timated PLHIV | Fast Track Component | | |
|------|---------------------|-----------------------|-----------|-----------|
| | | Diagnosed HIV+ | Treatment | \$urvival |
| | | (Know HIV Status) | | |
| 2015 | 88,000 | 62,694 | 47,933 | 34,991 |
| 2016 | 89,600 | 67,435 | 53,898 | 42,009 |
| 2017 | 91,200 | 72,176 | 59,864 | 49,027 |
| 2018 | 92,800 | 76,918 | 65,829 | 56,044 |
| 2019 | 94,400 | 81,659 | 71,795 | 63,062 |
| 2020 | 96,000 | 86,400 | 77,760 | 70,080 |

Western Province: Annual Fast Track Targets (2015 – 2020)























