Progress towards ending the HIV epidemic in Zimbabwe

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Presentation Outline

• Country HIV Epidemiology
• Achievements & Challenges
• Innovations
Country Context:

- Zimbabwe remain one of the countries in the world heavily burdened by HIV/AIDS & TB
  - 1.36m PLHIV
    - 1.25m adults
    - 74,460 adolescents
    - 76,650 children
  - (2018 HIV estimates)
  - HIV Prevalence: 14.04% among 15-49 yr age group
    - Female 16.7%
    - Male 10.5%
  - HIV Incidence: 0.49% (down from 1.42% in 2011, 0.98% in 2013)
    - (2018 HIV estimates)
  - MTCT rate 6.74%
    - (2018 HIV estimates)
  - TB/HIV co-infectivity rate of 63% [Global TB Report, 2018]

Total Popn ~ 13 million (2012 Census)
New HIV infections in Zimbabwe are primarily sexually transmitted among adults.

87% of new infections among adults 15+
13% among children

Heterosexual transmission (94% of adult infections)

Sex work-clients, partners 13%
Multiple including concurrent partnerships, casual sex (and other partner change due to separation, widowhood etc)
Transmission within stable relationships (38%)

Structural Factors
Social, cultural, economic environment, gender, stigma

Co-facilitated by low levels of male circumcision (& other biological factors)

IDU 0-1%
MSM (4%)
Blood
Abuse

Vertical transmission

Source: MOT, Preliminary 2018 National HIV estimates
The Health Sector Response

HIV PREVENTION

- Universal Precautions for Blood Screening
- HIV Testing Services
- Comprehensive Condom Programme
- STI Prevention & Management
- Voluntary Medical Male Circumcision

Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Care & Treatment

Anti-Retroviral Therapy (ART) Prevention & Management of OIs
Zimbabwe utilizes and promotes a combination approach to HIV prevention to reduce heterosexual transmission.
The national Response to HIV has been cross cutting and comprehensive to address the complex issues associated with the epidemic.

- Zimbabwe adopted a **multi-sectoral and multidisciplinary** response to the HIV epidemic.
- Implementation is **guided** by the ZNASP III, eMTCT strategy, Consolidated ARV Guidelines for Preventing and Treating HIV, VMMC Operational Plan etc.

**Guided, Cross-cutting Response**

**Public health Approach**

- A **public health approach** to scale up of HIV prevention, care & treatment
  - Population based
  - Evidence based
  - Simplified tools and guidelines

**Comprehensive context for implementation**

- Implementation is undertaken in the **context of a comprehensive combination** of HIV prevention, treatment, care and comprehensive HIV support package that addresses all.

Combination prevention refers to a systematic approach to implementing a range of HIV prevention interventions: behavioural and biomedical in synergy with structural interventions.
Zimbabwe Current (2018) HIV Estimates

Person living with HIV
- Total: 1,361,055
- Adults: 1,249,172
- Adolescents: 74,460
- Children: 76,650

Prevalence: 14.04%
Incidence: 0.49%
Final MTCT rate: 6.74%
In 2017, 11,860 new child infections were averted by eMTCT programme.

In 2017, an estimated 66,600 deaths were averted by ART in both adults and children.
Evolution of the OI/ART Programme, 2004 - 2018

- Country introduced OI/ART programme in April 2004 guided by
  - Plan feeds into overarching extended Zimbabwe National AIDS Strategic Plans (ZNASP), coordinated by one coordinating body (NAC) and monitored by one monitoring framework – The ‘Three Ones Principle’
Zimbabwe TB case notifications versus ART coverage, 2000-2013
Zimbabwe has made great progress in controlling the HIV epidemic and is well positioned to achieve & surpass the 90-90-90 Fast Track targets.

- The biggest gap to achieving the 90-90-90 targets is in HIV testing (16%).
- The new national HTS Strategy (2016-2020) shifts focus from testing for coverage to targeted testing for identification of those living with undiagnosed HIV.

Source: ZimPHIA, 2015; Spectrum, Zimbabwe National HIV Estimate
Despite recording remarkable progress in reducing HIV prevalence & incidence, wide variations still remain across provinces (Left) and districts (Right)....
HIV burden still high among adolescent girls and young women...

- HIV prevalence among 20- to 24-year-olds is three times higher among females (8.5 percent) than males (2.7 percent) which calls for urgent attention.

Source: ZIMPHIA, 1 Dec, 2016
Significant gaps remain particularly pronounced among key populations........
Despite achieving high overall retention rates of at least 88% & 83% at 12 & 24 months respectively, there still remains missed opportunities among adolescents & young people...

### Barriers to Retention

- Parent/caregiver interpretation of health status of child
- Understaffing at clinics
- Long clinic wait times
- Advanced Disease
- Inadequate clinical/laboratory services
- Malnutrition
- Mental health problems
- Proximity to clinic
- Stigma
- Age (<2yo)
- Loss of caregiver
- Lack of Disclosure
- Economic Barriers (transport costs and caregiver's lost wages)

**Time since ART initiation (in months)**

- 0-9 years
- 10-19 years
- 20+ years

**NB:** Age groups exclude pregnant women at ART initiation

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B. Phelps, Linkage, initiation and retention of children in the antiretroviral therapy cascade: an overview, AIDS. Nov 2013; 27..

ART Outcome Study Report, 2016
Despite routine VL having been scaled up significantly since 2016, VL testing coverage remains low...

- By end of Dec 2018, a total of 508,917 VL tests had been done translating to 44% testing coverage with a suppression rate of 85%
- Country has adequate VL testing platforms deployed country wide [both conventional (22) & POC (100)] however, with limited capacity utilization
- Challenges relating to VL testing include:
  - Sample transportation system
  - Extended total Turnaround Time

![Graph showing VL test numbers over years](source: 2017 ART End Term Programme Review)
Proportion of active patients enrolled in ART from 2013-2017 with suppressed VL from the first VL test stratified by age at health facilities with ePMS and in ART care for at least 12 months from ART initiation (N=114,857)

Adolescents aged 10-19 years had the least proportion of active patients that were suppressed (58%) compared to all the other age groups.

Older age groups tended to have higher proportions of active patients on ART that were virally suppressed.

Source: ePMS 2018
Baseline CD4 test done within 3 months after ART initiation. Only 21% of all new patients (2017 Cohort) had a baseline CD4 test done.

Source: ePMS, MOHCC
Paediatric and Adolescent HIV Issues:

- Long TAT for EID VL results with limited use of POC EID devices; limited access to VL testing services
- Weak sample transportation system for DBS and VL samples
- Adolescents experiencing challenges with adherence to medicines
- Elevated levels of common mental disorders among ALHIV
- Sub-optimal integration of HIV services with adolescent sexual and reproductive health
- Disclosure of HIV status
- Stigma and discrimination in health facilities, especially towards ALHIV
Increasing call for country to reconsider its 1st line regimen based on periodic HIV Drug Resistance Surveillance being done…

- Country has HIV DR prevention strategy
- TWG in place to guide implementation
- Country implementing all components of HIV DR prevention as per WHO Guidance
- Conducts Early warning Indicator (EWIs) surveys almost on an annual basis
- Conducted Pre-treatment (2016) and Acquired (2017) HIV DR surveys

Results of Pre-treatment HIV DR survey indicates resistance to NNRTIs of 10.9% which is above WHO recommended level and this warrants country to reconsider its 1st line regimen.
Innovations
HIV Testing Services:

• Shift from testing from coverage to targeted testing

• Models and approaches:
  • Facility based (PITC, Index case testing and HIV ST)
  • Community based - outreach, index case and HIV ST

• **Job aid developed** to screen children, adolescents and adults for HIV prior to testing aimed at reducing # of re-testing and supporting compliance to testing algorithms
1. HIV Self Testing

- Expansion of coverage to 44 districts in all the country’s 10 provinces
- Capacity building - 865 healthcare workers to date
- Different models used:
  - Community-based
  - Facility based
  - Secondary distribution
2. Birth HIV Testing to support Early Infant Diagnosis

- Protocol approved by MRCZ (CHAI/UNICEF)
- Training of implementing sites done
  - (Harare & Parirenyatwa – Specialist Centres) Data Collection March until June 30 2019
- EGPAAF arm Data collection October 2018-April 2019
- Outputs will inform
  - Feasibility of roll out of Birth testing in Zimbabwe
  - Care and treatment of HIV+ Neonates
  - Dosing guidance for RAL & dosing charts development
Timely ART initiation upon accurate EID

**WHO Infant testing algorithm**

- **Positive HIV NAT**
  - Infant is HIV infected
  - Immediate START ART
  - Repeat NAT to confirm HIV infection

Start ART, without delay and new specimen collected at the time of ART initiation

- **20% MTCT**
- **1% MTCT**

Confirmatory NAT is poorly implemented: how do we minimize unnecessary ART?
And let’s remember that Infant diagnosis is a process!

- Moving to a multi-HIV NAT algorithm
  - Birth (where of value)
  - 6 weeks
  - 9 months
  - Any time HIV exposed infants present sick

- Ensuring confirmatory testing of a positive NAT result is undertaken

- Diagnosis is not completed without “final diagnosis” at the end of the risk period for HIV transmission
3. Differentiated Service Delivery:

- Provision of tailored care that meets the preferences and expectations of the client
- 82% of adults and adolescents receiving ARV refills for 3+ months

Proportion of Districts that have at least one facility implementing any one DSD model

- OUTREACH
- CARGs
- FACILITY CLUB REFILL
- FAMILY REFILL
- FAST TRACK REFILLS
4. Treatment Optimization: Key Considerations

**Safety**
- Minimum adverse events
- Good adherence

**Efficacy**
- Potency of the medicine in achieving viral suppression

**Affordability/availability**
- Cost of the ARV medicines
- Generic formulations
- Availability in the market

**Reduced pill burden/od vs bd**
- Preferably Fixed-dose combinations
- Once daily regimes preferred (convenient)

**Harmonization across different age-groups & populations combinations**
- Limited number of options used across populations

Other considerations - simplicity of use/prescribing by lower level cadres, cold chain requirements, existence of comorbid conditions
DTG Transitioning Roadmap

Consultations with various stakeholders including WLHIV [ZIMA; MIPA; Media Practitioners etc]

Adaptation committee and NMTPAC to provide guidance to DTG Transition Policy

Development of Tools - Addendum to the National ARV Guidelines; training materials, Job AIDs

Sensitization & training of HCWs

Strengthen Pharmacovigilance systems & SRH/HIV linkages

- Country adopting a phased in approach in introducing DTG based treatment regimens for 1st and 2nd line clients
  - All ‘eligible’ ART naïve clients starting from May 2019
  - All ‘eligible’ existing clients on ART after Aug 2019
5. HIV Case-Based Surveillance (CBS)

- Country entered a new treatment era with potential to eliminate HIV, MTCT & syphilis
  - Increased **focus on prevention in high-risk population groups** and geo-locations/ hot spots to reduce and interrupt HIV transmission and end AIDS
  - High need to **provide an accurate (unduplicated) measure of the HIV care cascade indicators** disaggregated by age, sex, risk population, geography and by individual
  - Increased **focus on targeting of resources and evaluation of program impact**
  - Increased **focus on retention of long term patient follow up** and tracking patient outcomes

- Zimbabwe selected with 3 other countries (Tanzania, Malawi and DRC) for first round of support by WHO to introduce CBS
  - Lessons learnt from implementation to inform subsequent roll out & introduction of CBS in region.

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**WHO. Consolidated Strategic Information Guidelines for HIV in the Health Sector. May 2015**
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• MOHCC AIDS and TB Programs
• PMDs, DMOs
• All levels of health care delivery systems