

# ACCELERATING ACHIEVEMENT OF THE 95-95-95 TARGETS IN SOUTH AFRICA USING A PAEDIATRIC AND ADOLESCENT MATRIX OF INTERVENTIONS

L Bamford<sup>1</sup>, T. Silere-Maqetseba<sup>1</sup>, Y. Maharaj<sup>2</sup>, R. Fritz<sup>1</sup>, Y. Pillay<sup>2</sup> South African National Department of Health, Pretoria, South Africa, Clinton Health Access Initiative, Pretoria, South Africa

## BACKGROUND

Although South Africa has made progress towards achievement of the 95-95-95 targets in the overall population, a notable gap in HIV testing and treatment of children and adolescents remains with the cascade for children under 15 years standing at 81-61-67 as of March 2023 (see Figure 1. below).

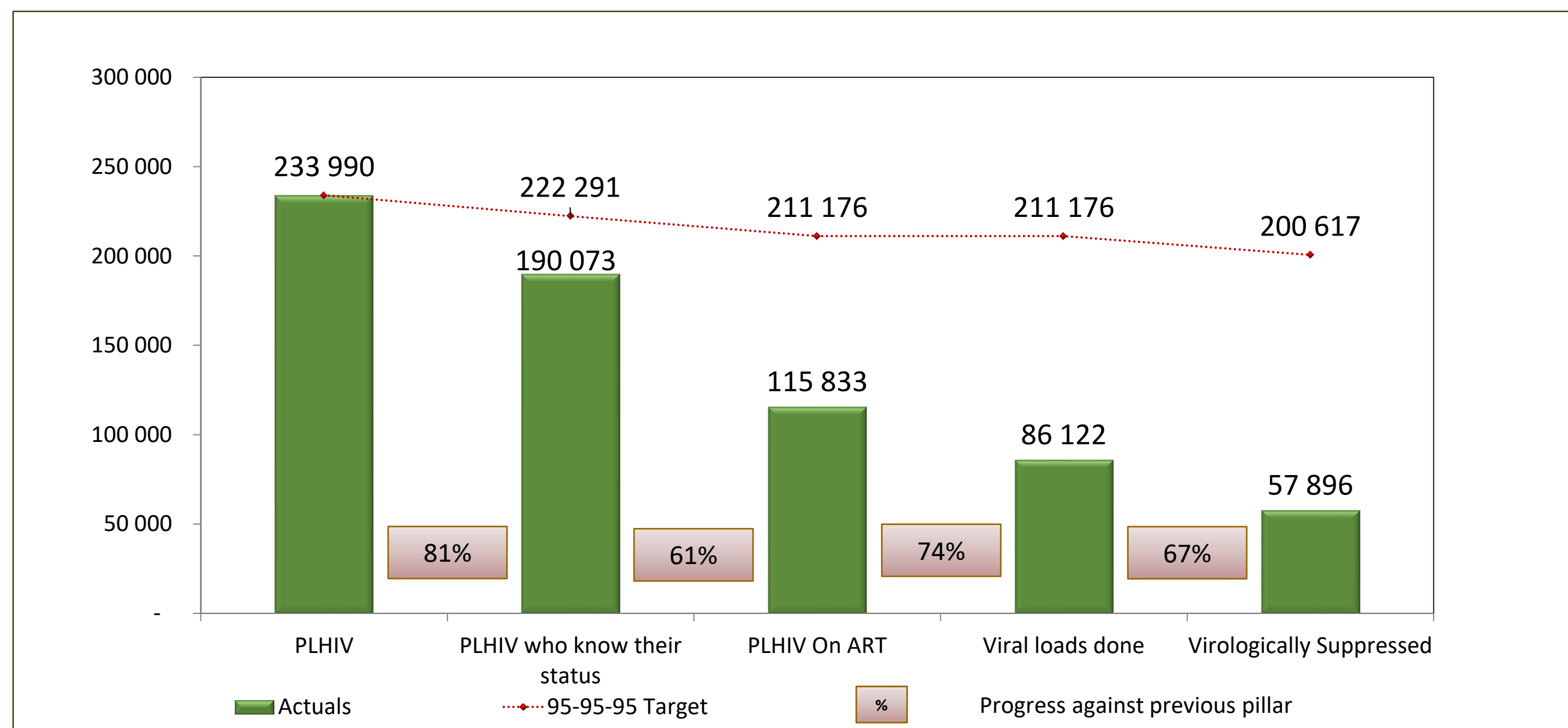


Figure 1: 95-95-95 cascade – children under 15 years in South Africa as of March 2023. Source: District Health Information Systems (DHIS)

ARV coverage and viral suppression rates are lowest in young children as shown in Table 1 and Figure 2 with fewer than half of children living with HIV under 5 years of age being on treatment. However, as a result of declines in vertical transmission and ongoing acquisition of HIV infection by adolescent girls, the highest number of children and adolescents not on treatment occur in the 10 – 14 year and 15 – 19 year age cohorts. Viral suppression rates are also lowest amongst young children and increase across age cohorts (see Figure 2).

| Age group | Females         |         |              |         | Males           |         |              |        |
|-----------|-----------------|---------|--------------|---------|-----------------|---------|--------------|--------|
|           | Living with HIV | On ART  | ART Coverage | Gap     | Living with HIV | On ART  | ART Coverage | Gap    |
| 0-4yrs    | 19,270          | 9,061   | 47%          | 10,210  | 19,576          | 7,827   | 40%          | 11,748 |
| 5-9yrs    | 37,175          | 18,757  | 50%          | 18,418  | 37,725          | 17,655  | 47%          | 20,070 |
| 10-14yrs  | 60,040          | 32,577  | 54%          | 27,463  | 60,205          | 29,956  | 50%          | 30,249 |
| 15-19yrs  | 132,257         | 76,442  | 58%          | 55,815  | 71,423          | 46,368  | 65%          | 25,055 |
| 0-19yrs   | 248,742         | 136,837 | 55%          | 111,905 | 188,928         | 101,806 | 54%          | 87,122 |

Table 1: ART coverage in children and adolescents living with HIV in South Africa (PLHIV data - Sept 2021; DHIS data - March 2023; CMS data - Dec 2021)

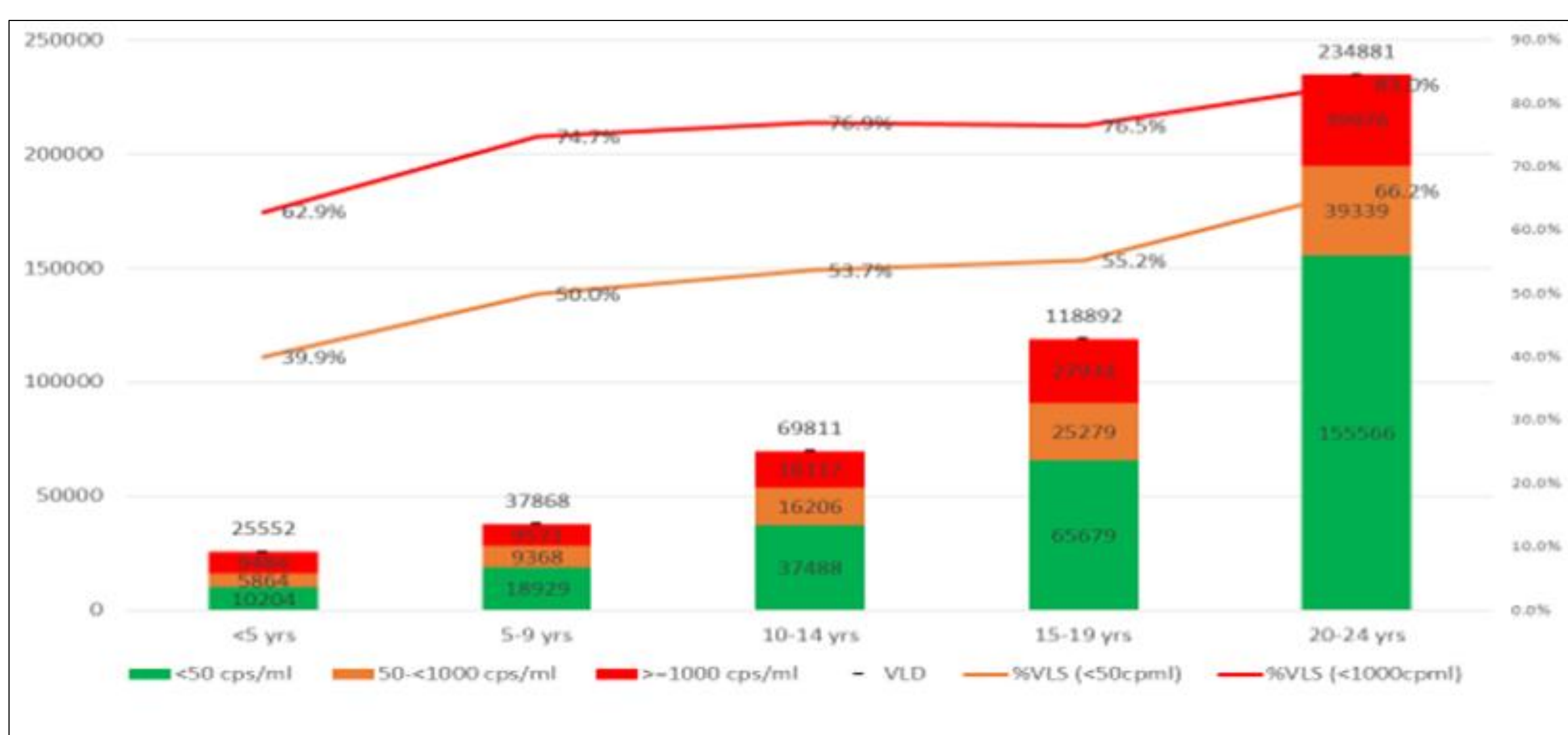


Figure 2: Number of Viral Loads taken and Viral Load suppression amongst children and adolescents living with HIV in South Africa, January - December 2022, (National Health Laboratory Services data)

## DEVELOPING AND IMPLEMENTING THE MATRIX OF INTERVENTIONS

Within the South African public sector, HIV treatment services are provided through approximately 3 500 primary health care clinics and community health centres. In order to reach the 95-95-95 targets and to end AIDS in children, minimum standards of care for children living with HIV (CLHIV) need to be explicitly defined, prioritized, communicated and implemented at scale in all health facilities and in their local communities, and monitored across facility, district and provincial levels.

As a first step in this process, the National Department of Health convened a consultative process with various stakeholders including provincial Departments of Health, Clinical Technical Advisors, implementing partners and donors, during which a package of interventions (both community-based and facility-based) across the 95-95-95 cascade were discussed, refined, and finalised.

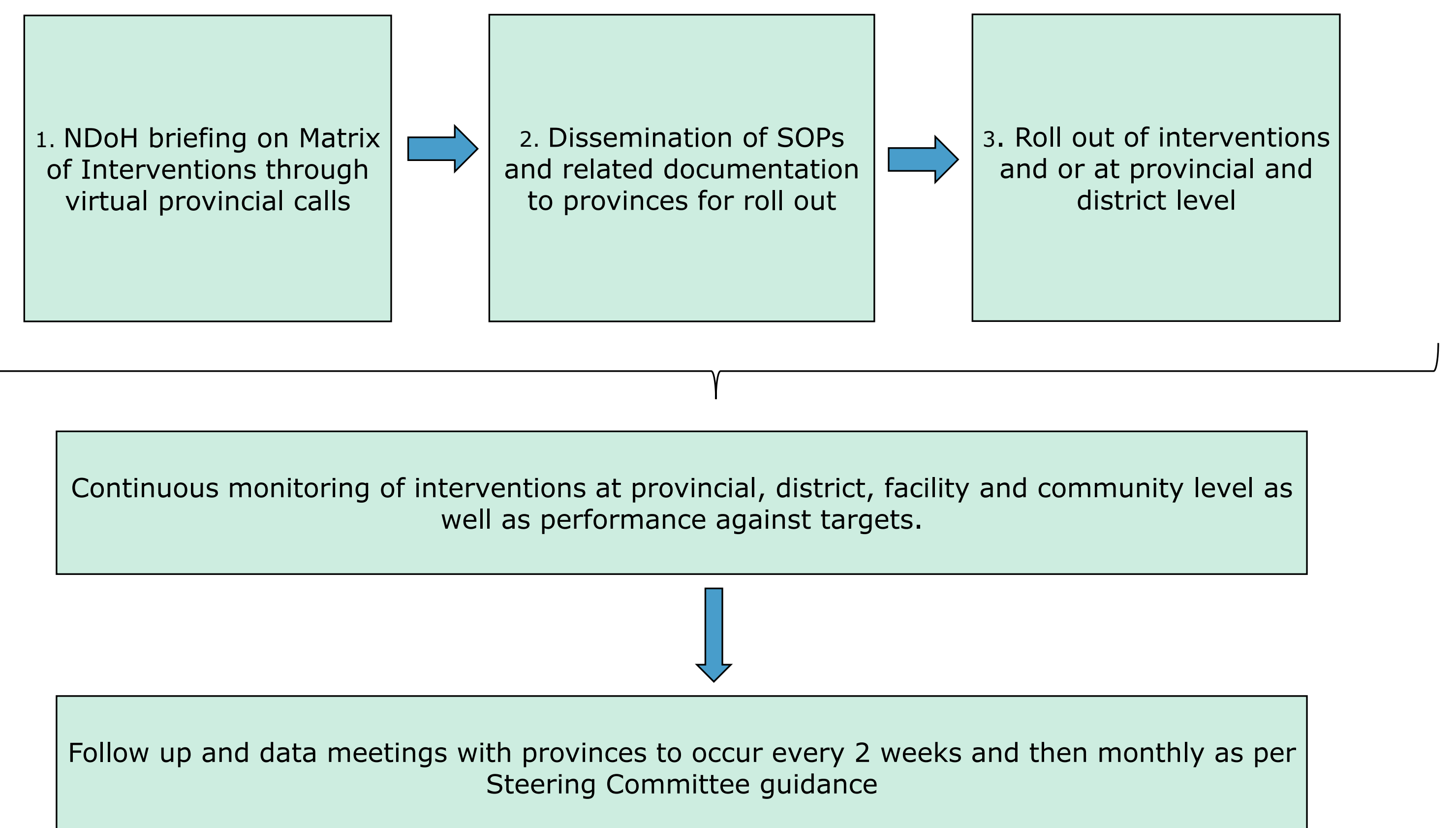


Figure 3: Matrix of Intervention (MOI) roll out process

These interventions formed the Matrix of Interventions which is shown in Table 2. Detailed standard operating procedures (SOPs) for each intervention in the MOI have been developed in order to provide facilities with detailed guidance on how to implement and monitor interventions. Each of the nine provinces developed a plan for implementing the MOI interventions, and a Steering Committee was formed to monitor performance against targets.

| Cascade                       | Setting                      | High Level Intervention   | Age groups |     |       |       |
|-------------------------------|------------------------------|---|------------|-----|-------|-------|
|                               |                              |   | 0-4        | 5-9 | 10-14 | 15-19 |
| 1 <sup>st</sup> 95            | Facility (Or mobile clinics) | Key entry point testing   | X          | X   | X     | X     |
|                               |                              | Index Testing   | X          | X   | X     | X     |
| 2 <sup>nd</sup> 95            | Community                    | Community-based screening and referral for testing  | X          | X   | X     | X     |
|                               |                              | Linkage to care through the use of Lab Results for Action Datasheets                                      | X          | X   | X     | X     |
| 3 <sup>rd</sup> 95            | Facility & Community         | Digitisation of PCR Positive results  | X          | -   | -     | -     |
|                               |                              | Community health worker Tracking and Tracing/recall for ARV initiation                                    | X          | X   | X     | X     |
| Retention & Viral Suppression | Facility                     | Child, Adolescent and Family Care Days  | X          | X   | X     | X     |
|                               |                              | Community-based psychosocial support  | X          | X   | X     | X     |
| Retention & Viral Suppression | Facility & Community         | Community Health Worker Tracking and Tracing for those with missed appointments for re-engagement in care | X          | X   | X     | X     |

Table 2: Paediatric and Adolescent Matrix of Interventions

## LESSONS LEARNED

The MOI has assisted in focusing, standardising and co-ordinating interventions implemented by multiple stakeholders. The tool has assisted HIV AIDS STI and TB (HAST) programme managers to improve monitoring and evaluation of the programme at the facility/district and provincial levels. Currently interventions aimed at reducing vertical transmission of HIV as well as those aimed at ensuring that children are transitioned to DTG-containing regimens are being integrated into the matrix.

To date improvements against the 95-95-95 targets remain modest, in part as a result of the effects of the COVID-19 pandemic. Although key interventions should be implemented across all facilities, some interventions have proved difficult to implement without additional support and resources provided by partner organizations.

## CONCLUSIONS

The MOI provides a standardised framework for implementing evidence-based, proven strategies focused on identification, strong linkage systems, and improved retention and viral suppression. It provides the basis for ensuring standardized implementation and for holding health facilities and partner support organisations accountable for ensuring improved outcomes for children living with HIV.

## THE GLOBAL ALLIANCE TO END IN CHILDREN

Angola, Cameroon, Côte d'Ivoire, the Democratic Republic of the Congo, Kenya, Mozambique, Nigeria, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe formed the Global Alliance to End AIDS in Children at the AIDS 2022 in Montreal (QC, Canada). In February 2023, South Africa and the other 11 African nations met in Tanzania to sign the Dar es Salaam Declaration for Action to End AIDS in Children by 2030. The declaration affirms a commitment to ending paediatric HIV.

The four key pillars of the Global Alliance plan (which feature the interventions from the MOI as key strategies) are:

- Multimodal testing and optimized comprehensive, high quality treatment and care for infants, children, and adolescents living with and children exposed to HIV
- Closing the treatment gap for pregnant and breastfeeding women living with HIV and optimizing continuity of treatment towards the goal of elimination of vertical transmission
- Preventing and detecting new HIV infections among pregnant and breastfeeding adolescents and women and
- Addressing rights, gender equality and the social and structural barriers that hinder access to services.