

Vertical Transmission Elimination: Scaling up VTE efforts through strengthened policy/guidelines dissemination, capacity building and service coverage expansion



Subnational VTE Highlights: South Africa

T Silere-Maqetseba¹, D Lole¹, Y Maharaj¹, Z Kwindi¹, N Dube², L Ntloko², E Machaba², L Lunywayo³, F Spayile³, N Matolweni³
 (1) Padiatric-Adolescent Treatment Africa (PATA) (2) Gauteng Provincial Department of Health (3) Eastern Cape Provincial Department of Health



BACKGROUND

In July 2025, South Africa conducted their first subnational VTE Capability Maturity Model (CMM) assessments. This assessment enabled the HIVE priority provinces (Eastern Cape and Gauteng) to evaluate the maturity of their Vertical Transmission Elimination (VTE) programs and establish baseline data. Although both provinces have successfully disseminated key VTE policies and guidelines and have trained healthcare providers in targeted facilities, there is still a gap noted in VTE service delivery for pregnant and breastfeeding women, particularly in maternity units and delivery sites, which led to a follow up training designed specifically for Healthcare workers in the Maternity unit /MCWH stream of PHC facilities

VTE UPTAKE OF SERVICES AT SUB-NATIONAL LEVEL

Figure 1: Pre-exposure Prophylaxis (PrEP) for Pregnant Women

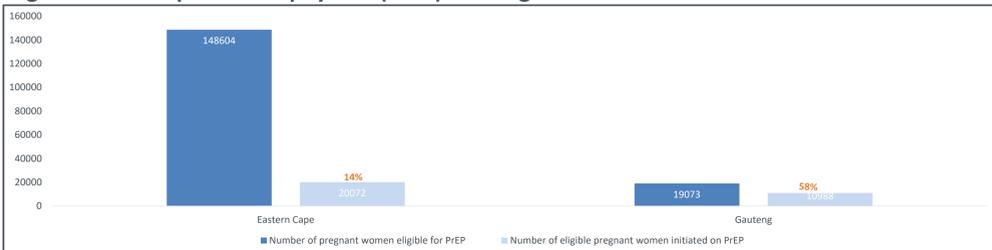


Figure 2: HIV testing of infants with perinatal HIV exposure during the 18-24m

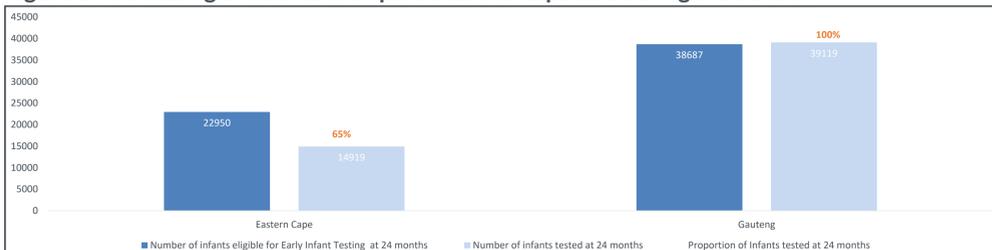
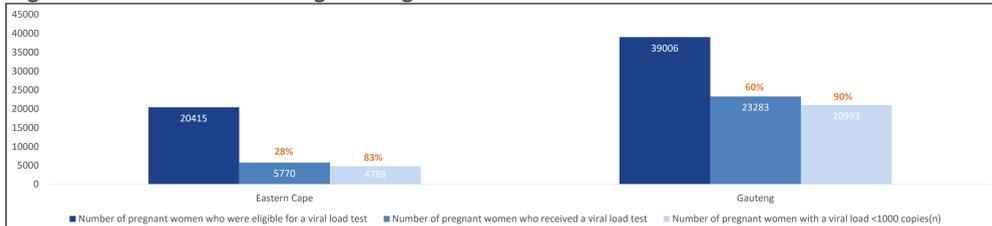


Figure 3: Viral load monitoring for Pregnant Women



SUMMARY OF RESULTS Source: DHIS, June 2024 to July 2025

Figure 1 compares PrEP eligibility and initiation among pregnant women in Eastern Cape and Gauteng. In Eastern Cape, only 14% of eligible pregnant women were initiated on PrEP, despite the province having the highest number of eligible women. In contrast, Gauteng achieved a higher initiation rate of 58%, reflecting stronger uptake and program efficiency. Overall, this highlights a major implementation gap in Eastern Cape, where high eligibility has not translated into proportional PrEP initiation.

Figure 2 shows that Gauteng achieved full coverage for early infant testing at 24 months, exceeding eligibility with 100%, indicating strong follow-up and data reporting. In contrast, Eastern Cape's performance is lower, with only 65% of eligible infants tested, reflecting significant gaps in testing uptake and retention in care.

Figure 3: highlights that Gauteng surpasses Eastern Cape in viral load testing among pregnant women, with 60% of eligible women tested compared to 28%. However, both provinces maintain strong viral suppression rates among those tested 83% in Eastern Cape and slightly lower in Gauteng, indicating good treatment effectiveness where testing occurs, but major gaps in testing coverage, especially in Eastern Cape.

HIVE ENGAGEMENT AND ACHIEVEMENTS

Both provinces have conducted capacity-building exercises focusing on quality improvement for Vertical Transmission Elimination (VTE), targeting healthcare providers. In addition, a key achievement has been the introduction of "HIVE Fridays," a short, impactful training initiative focusing on VTE. Conducted every Friday, these 15-minute sessions are delivered via WhatsApp, reaching over 200 healthcare providers weekly. The HIVE project also developed an orientation training package for health promoters on VTP in one of the HIVE districts in Gauteng.

VTE CAPABILITY MATURITY MODEL 2025

Figure 4: CMM Staging for Eastern Cape and Gauteng

Domain	Eastern Cape	Gauteng
A1	Dark Green	Dark Green
B1	Dark Green	Dark Green
C1	Dark Green	Dark Green
D1	Yellow	Dark Green
E1	Yellow	Dark Green
E4	Yellow	Dark Green
F1	Yellow	Dark Green
G1	Yellow	Dark Green
H1	Yellow	Dark Green
H3	Yellow	Dark Green
J	Yellow	Red
K	Yellow	Red
L	Yellow	Red
M	Yellow	Red
N1	Yellow	Red
R	Yellow	Red
S	Yellow	Red
T	Yellow	Red
U1	Yellow	Red
U2	Yellow	Red
V1	Yellow	Red
V2	Yellow	Red
W1	Yellow	Red
W2	Yellow	Red
Y	Yellow	Red
Z	Yellow	Red
AA1	Yellow	Red
AB1	Yellow	Red

Figure 4: shows the results of the country team's recent self-assessment using the subnational VTE capability maturity model. In August 2025, Eastern Cape attained the highest maturity stage (dark green) in 3 domains, while 8 domains were at the lowest maturity stage (red). In contrast, Gauteng achieved the highest maturity stage (dark green) in 5 domains, with 13 domains at the lowest maturity stage (red).

As much as the country develops guidelines, and implementation happens at the district level, provinces has power to develop their own implementation SOPs. This is noted in the differences from both provinces in how they collect and report data.

VTE MATURITY MODEL SELF-STAGING – EASTERN CAPE

Policy/guidelines: HIV testing of infants perinatally exposed 18- 24m	Most mature domains
Policy/guidelines: PrEP for Pregnant Women	Most mature domains
Policy/guidelines: PrEP for Breastfeeding Women	Most mature domains
Policy/guidelines: Postnatal Prophylaxis for Infants Perinatally Exposed to HIV	Most mature domains
DART Services for Pregnant and Breastfeeding Women with HIV	Most mature domains
Policy/guidelines: Viral load monitoring for Pregnant Women	Most mature domains
Health Facility Coverage of DSD for PBFW	Least mature domains
Testing Coverage in Pregnant Women	Least mature domains
Testing Coverage in Breastfeeding Women	Least mature domains
Timely ART Initiation for Pregnant Women	Least mature domains
ART Coverage for Pregnant Women	Least mature domains
ART Coverage for Breastfeeding Women	Least mature domains
Adherence to EID schedule for infants perinatally exposed to HIV	Least mature domains
Quality of Services for PBFW	Least mature domains
Elimination of Transmission of Syphilis	Least mature domains
Elimination of transmission of Hep B	Least mature domains

Figure 5 illustrates the maturity levels of various domains related to VTE, categorizing them from the most mature (green) to the least mature (red) areas. While policy and guideline development represent the strongest (most mature) domains, coverage, adherence, and service delivery outcomes remain the weakest (least mature), underscoring the need to strengthen operationalization, health facility performance, and data-driven accountability to achieve full VTE maturity.

VTE MATURITY MODEL SELF-STAGING – GAUTENG

Policy/guidelines: HIV testing of infants perinatally exposed 18- 24m	Most mature domains
Policy/guidelines: PrEP for Pregnant Women	Most mature domains
Policy/guidelines: PrEP for Breastfeeding Women	Most mature domains
Policy/guidelines: Postnatal Prophylaxis for Infants Perinatally Exposed to HIV	Most mature domains
DART Services for Pregnant and Breastfeeding Women with HIV	Most mature domains
Policy/guidelines: Viral load monitoring for Pregnant Women	Most mature domains
Policy/guidelines: Viral load monitoring for Breastfeeding Women	Most mature domains
Operational Guidance	Most mature domains
Linking and Learning Platform	Most mature domains
Quality of Services for PBFW	Most mature domains
Elimination of Transmission of Syphilis	Most mature domains
Elimination of transmission of Hep B	Most mature domains
DSD Scale-Up Plan for PBFW	Least mature domains
Coordination	Least mature domains
Community Engagement	Least mature domains
Procurement and Stock Management	Least mature domains
M&E System	Least mature domains
Health Facility Coverage of DSD for PBFW	Least mature domains
Testing Coverage in Pregnant Women	Least mature domains
Testing Coverage in Breastfeeding Women	Least mature domains
Timely ART Initiation for Pregnant Women	Least mature domains
ART Coverage for Pregnant Women	Least mature domains
ART Coverage for Breastfeeding Women	Least mature domains
Adherence to EID schedule for infants perinatally exposed to HIV	Least mature domains

Figure 6: The image shows that more mature domains focus on robust policy and guideline development, especially for HIV testing across the antenatal, delivery, and postnatal periods. These areas have clear frameworks supporting consistent implementation. In contrast, the least mature domains—such as ART coverage, timely ART initiation, testing coverage, and EID adherence—reflect weaknesses in service delivery and implementation. Overall, while policies are well-established, translating them into effective coverage and outcomes remains the main challenge.

NEXT STEPS / WAY FORWARD

The subnational teams from both provinces developed a draft action plan for the gaps noted in the CMM process. The PrEP initiation for pregnant and breastfeeding women, remains the most challenging indicator for both provinces. The maternal viral load uptake in provinces is low, and this is measured by using the Electronic Gate Keeping codes (EGK) from the labs. A draft Interprovincial linking and learning plan was also developed to enhance learning and address the gaps identified among provinces. Each province will have a Technical advisor, who will offer mentorship throughout the 20 facilities that have been identified—10 in each province—to create Quality Improvement Plans aimed at bridging these gaps.

