

A vertical strip on the left side of the slide features several white silhouettes of people of various heights and shapes, set against a dark blue background.

Strategies for PMTCT: Obtaining the most benefit with limited resources

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Zambia (CIDRZ)**

CIDRZ

- Collaboration between UAB and the
Zambian Ministry of Health
 - Lusaka Health District
 - University Teaching Hospital
 - Other districts and provinces as
directed by the Ministry
- 3 Part Mission
 - Research
 - Training
 - Support to Clinical Care
- Operates under direction of MOH
- Governed by Board of Directors
with Zambian Board President

Yearly Burden of Pediatric HIV in Lusaka

45,000 Deliveries

(24% of women are infected)

10,800 Infected Mothers

(40% will transmit the infection)

4,320 Infected Babies

(if we do nothing)

CIDRZ support to PMTCT sites

- Training
 - VCT (voluntary counseling and testing)
 - Antiretroviral drug use
 - Infant feeding counseling
 - Clinic operations / logistics
- Antiretrovirals (NVP & AZT)
- HIV test kits
- Basic Care Package
 - Syphilis testing and treatment
 - Vitamins, iron, folate
 - Malaria prophylaxis
- Support for over-time work
- Support for Community
- Quality assurance oversight

A stepped (tapering) approach

- Initial phase
 - Intensive support
 - CIDRZ staff train and manage the process
 - Overtime shifts paid directly by CIDRZ
 - Pharmacy and reagent forecasting
 - Planning for community mobilization
 - Quality oversight by CIDRZ
- Secondary phase
 - Funding for overtime shifts given to Health District
 - Quality oversight provided by “zone leaders”
- Tertiary phase
 - Grant to the Health District
 - Program management the responsibility of the Health District
 - Data collected and reviewed by CIDRZ epidemiologist

Women Reached at 81 CIDRZ-supported PMTCT Sites in Zambia

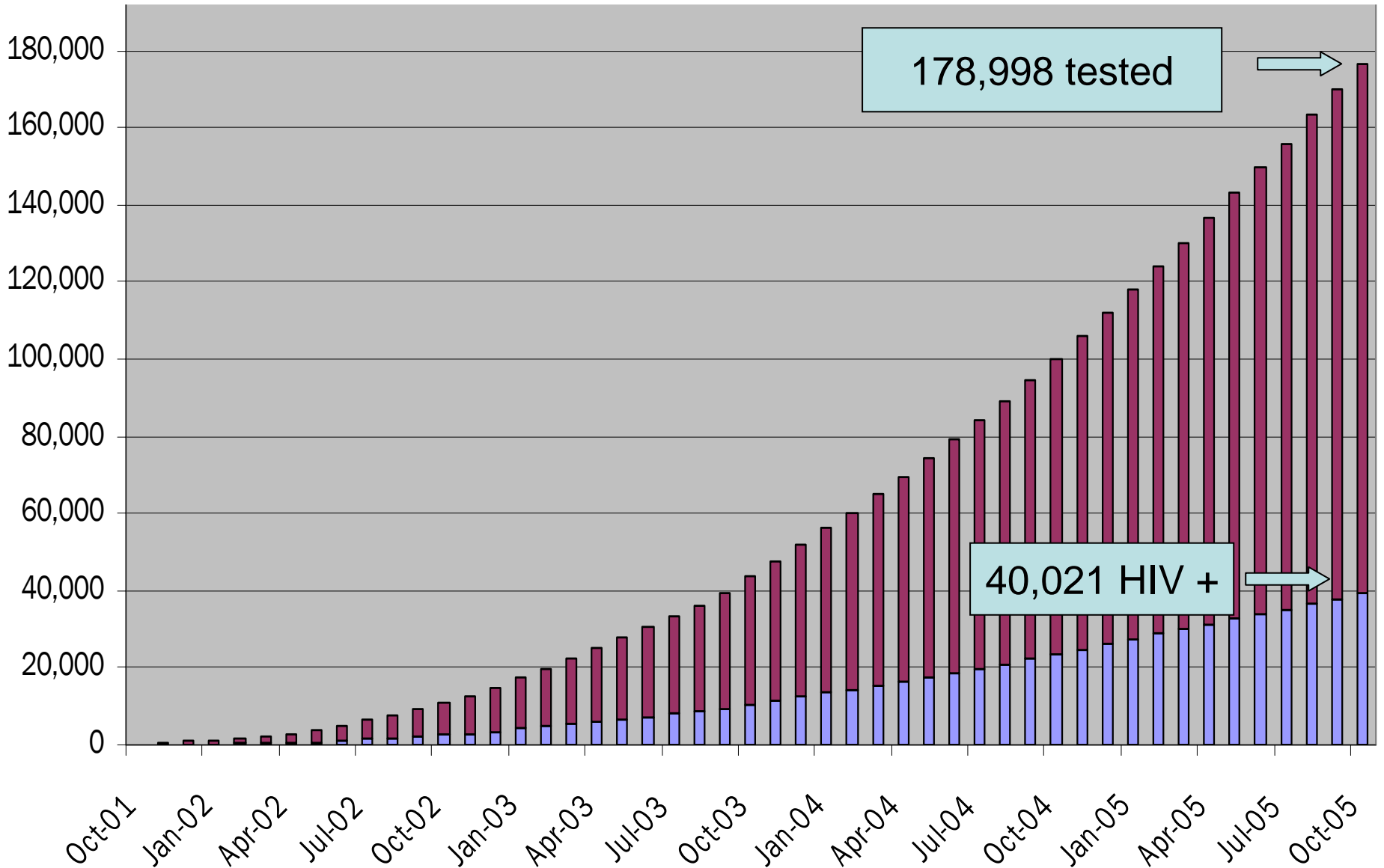
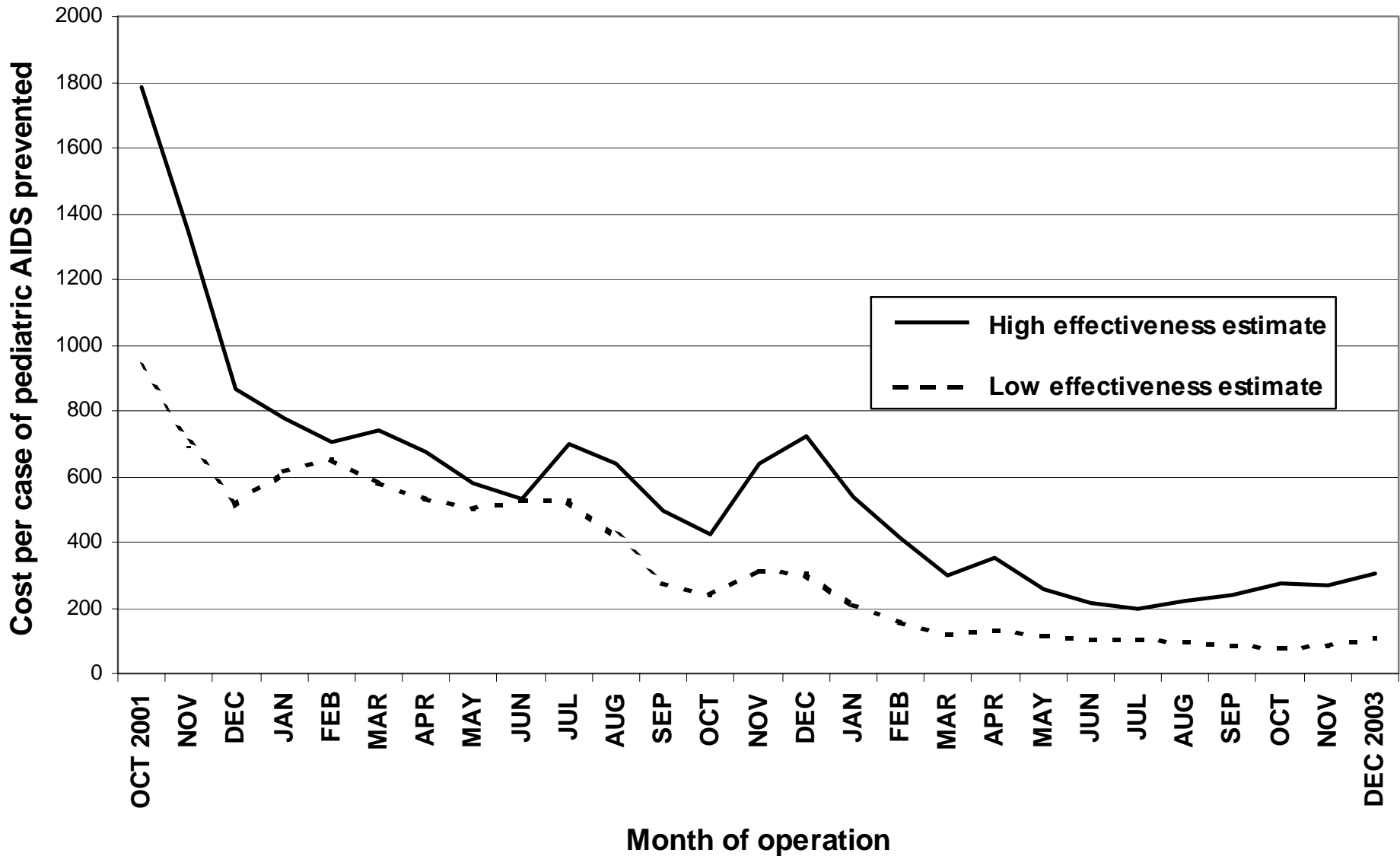
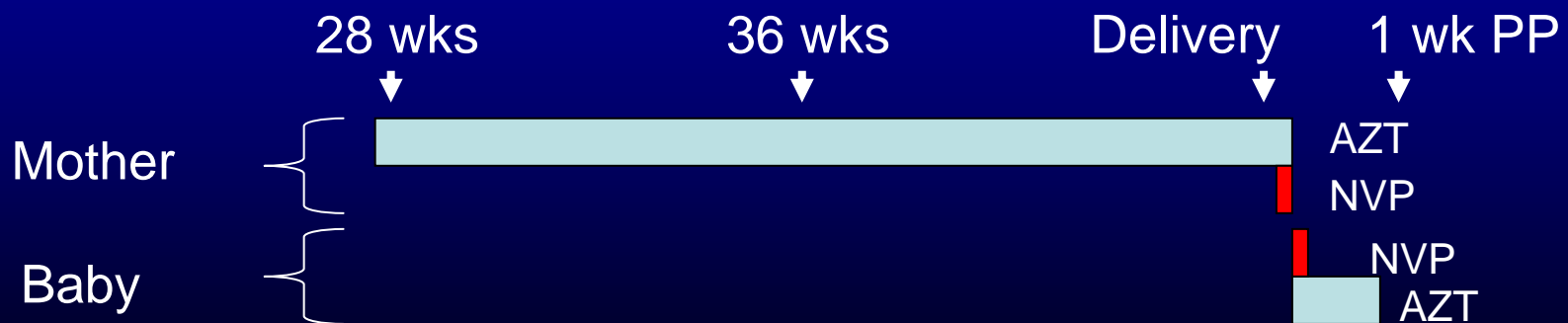


Figure: Cost-effectiveness of the PMTCT program over time

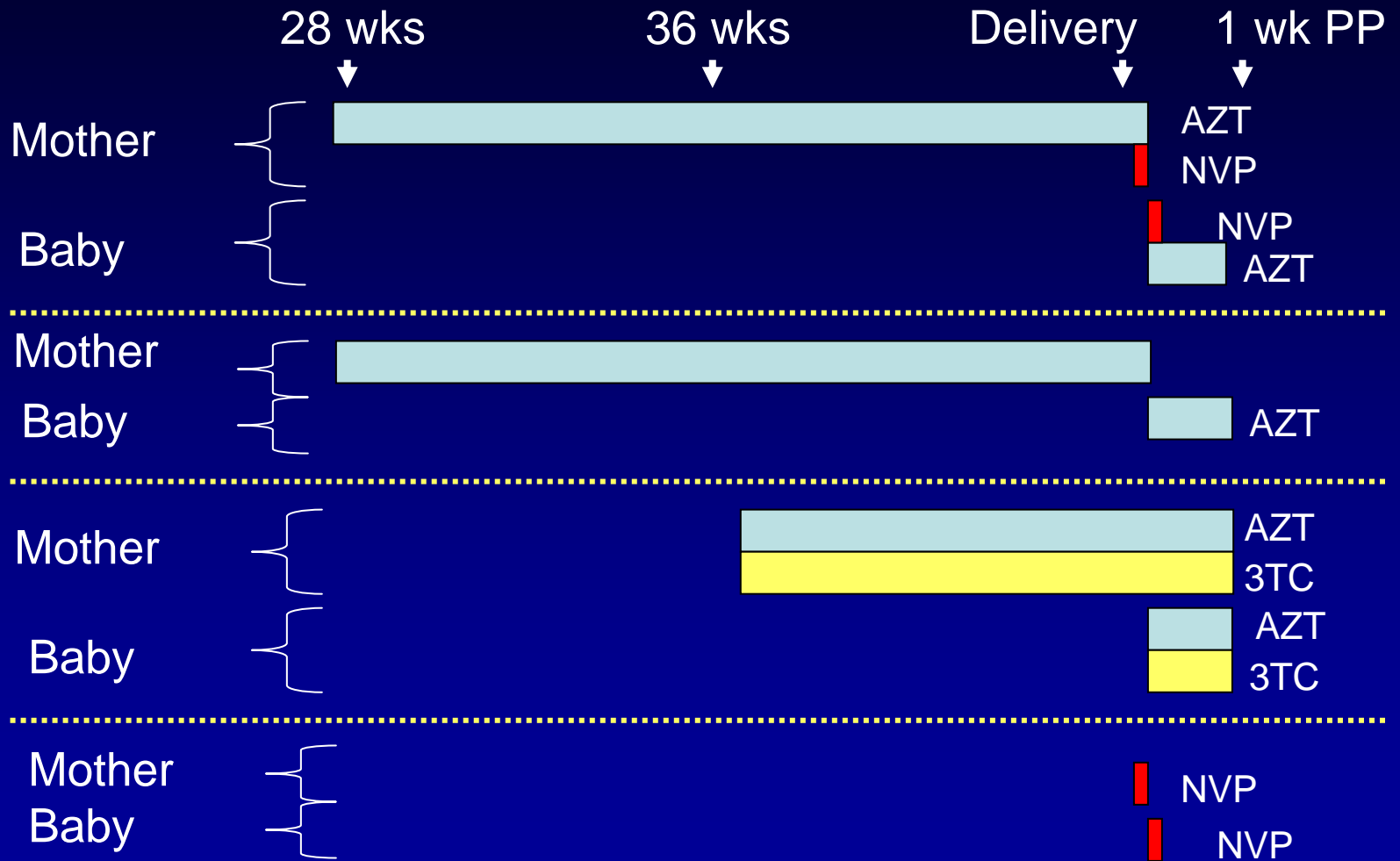


WHO Recommendations for PMTCT where ART is available

- Evaluate women for ART eligibility
- In those who qualify, commence HAART
- In those who do not qualify:
 - Mother: AZT from 28 weeks + sdNVP
 - Infant sdNVP at birth plus AZT for 1 wk

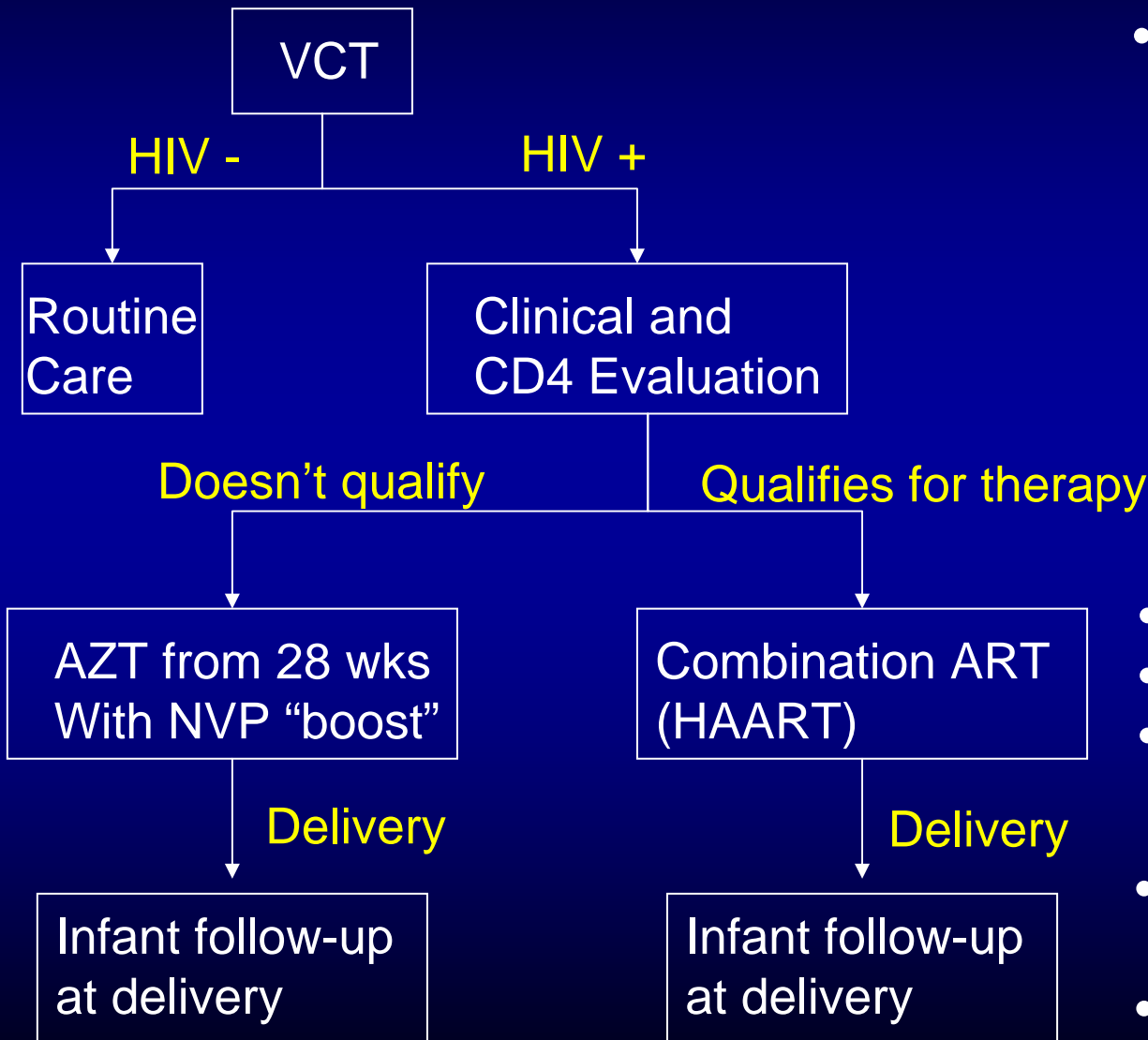


WHO recommended regimens to prevent MTCT





Ideal Scenario and its Requirements



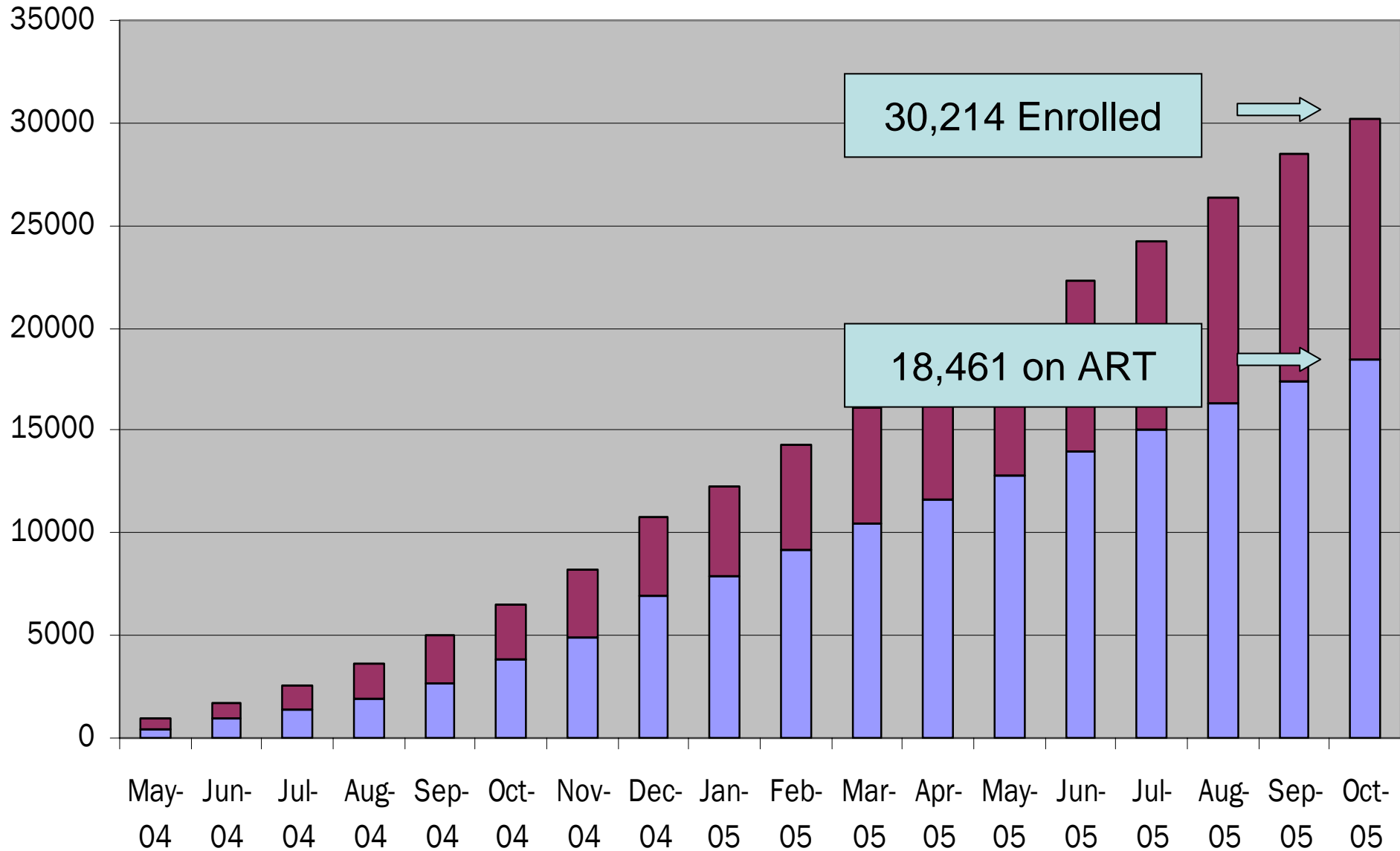
- Additional counseling staff

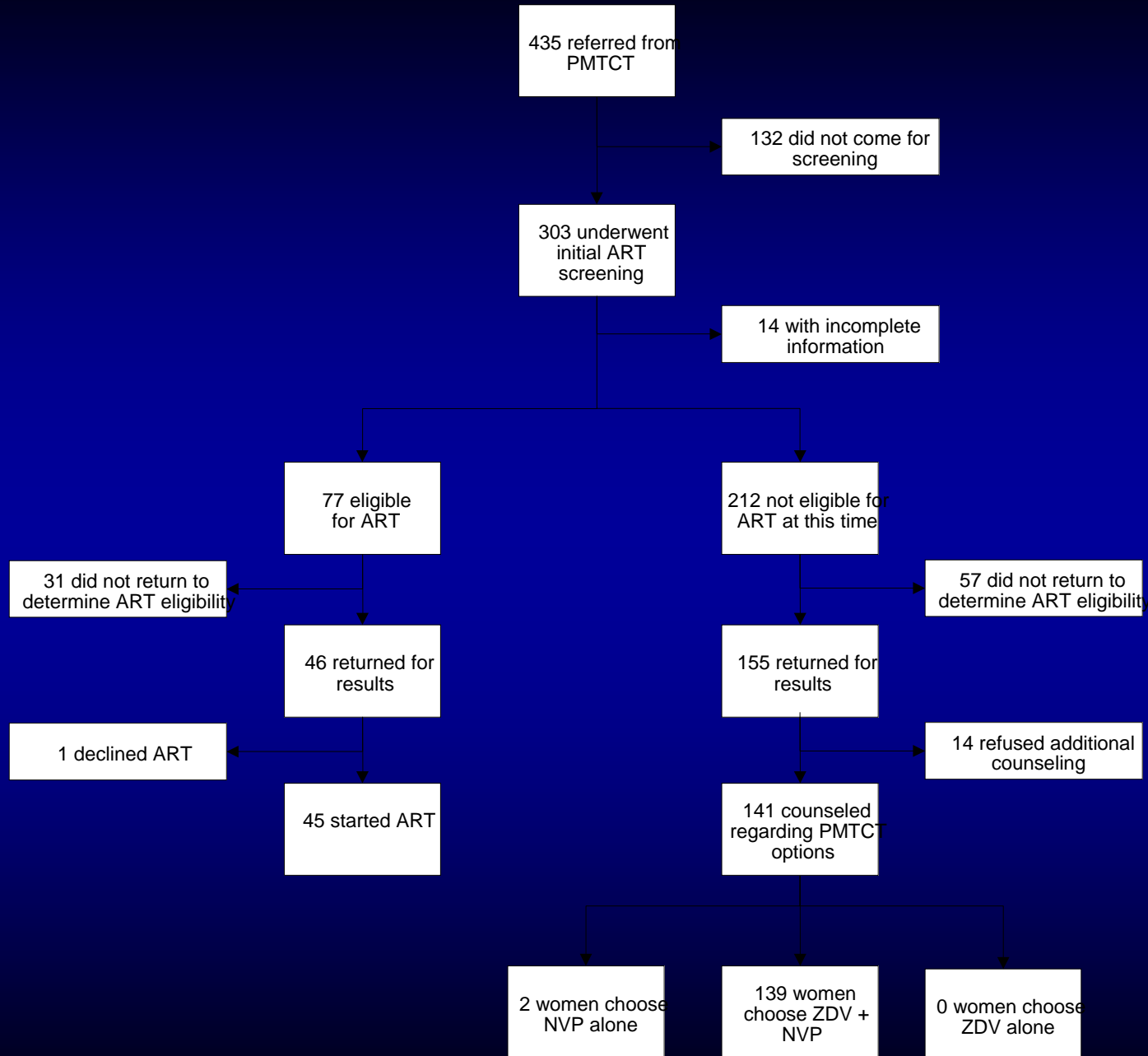
- Additional staff (trained in WHO Staging)
- CD4+ capacity

- Additional trained
- Laboratory monitoring
- “longitudinal care”

- Ability to link services to identify exposed kids
- PCR capacity

People Reached at 18 CIDRZ-supported ART Sites in Zambia

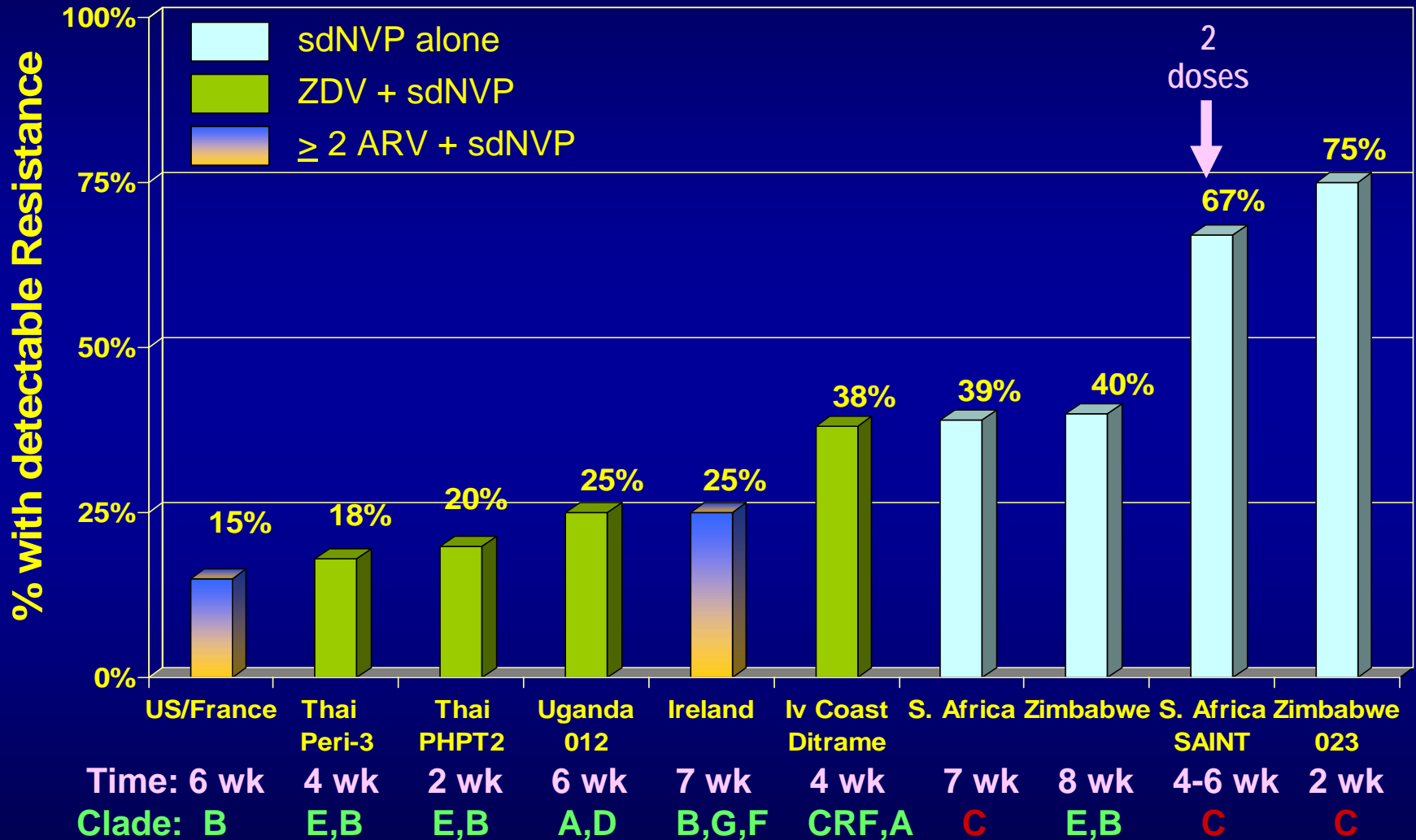




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NVP Resistance

Acquisition of NVP Resistance in Mothers Following sd NVP Prophylaxis

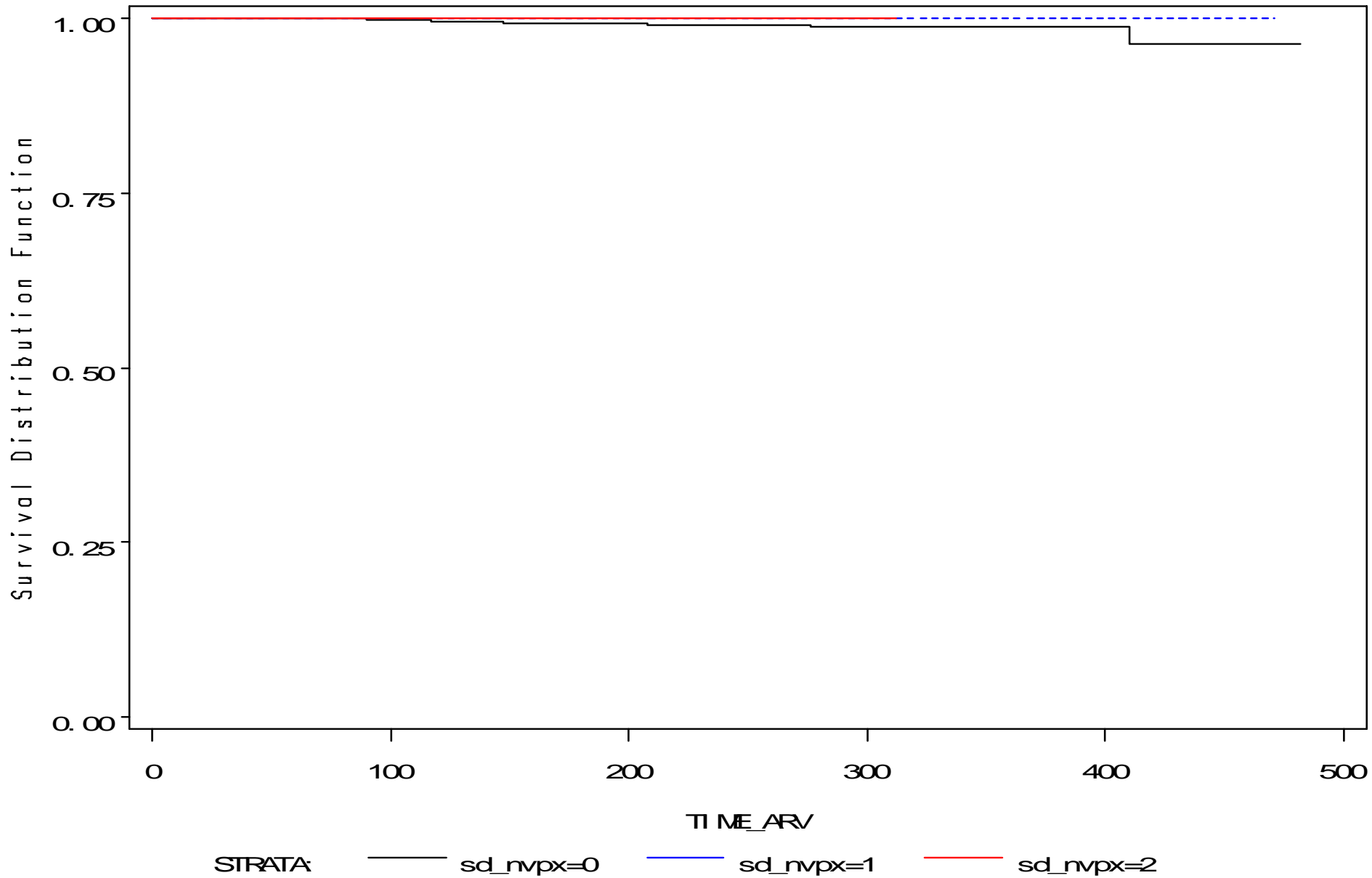


Prior NVP Exposure

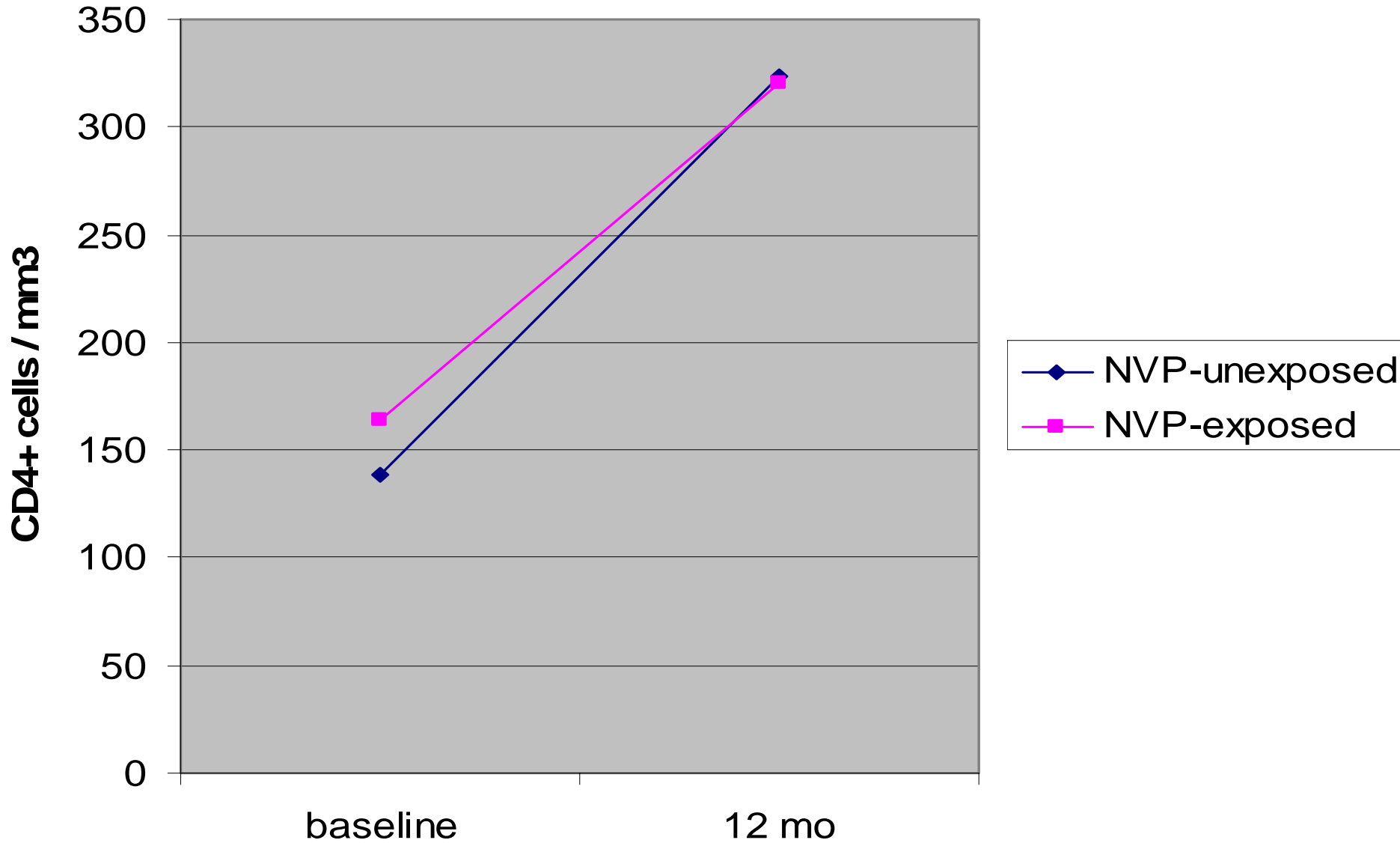
	Not on anti-retrovirals	On anti-retrovirals
No Exposure	394	1288
1 Exposure	114	164
2 Exposures	11	8

Approximately 20% of charts reviewed

Survival by sd NVP Exposure



CD4 Response in NVP-exposed and Unexposed Women on ART



How well are we doing on a
population basis?

Analysis of the Lusaka NVP-
based PMTCT program

Cord Blood Surveillance Study

- Anonymous cord blood specimens from all deliveries in Lusaka
 - 12 week period
- Test for HIV antibodies and NVP
- “Coverage” = +NVP / +HIV Abs
- Results linked to
 - antenatal HIV testing history from medical record
 - Whether the infant was dosed prior to discharge
- n.b. Assumes sd NVP will be effective in mother-infant pairs that ingest it

10,384 Women Gave Birth to Live Infants in Public Sector Facilities



- 66 Clotted Specimen**
- 74 Insufficient Specimen Volume**
- 17 Cord Avulsions**
- 1 Fetal Anomaly**
- 4 Retained Placentas**
- 10 Unspecified Reasons**

10,194 Specimens Obtained

98%



- 653 ANC Outside Lusaka**
- 733 ANC at Private Facility**
- 65 No ANC**

8,787 Received ANC at Facility Offering PMTCT Services

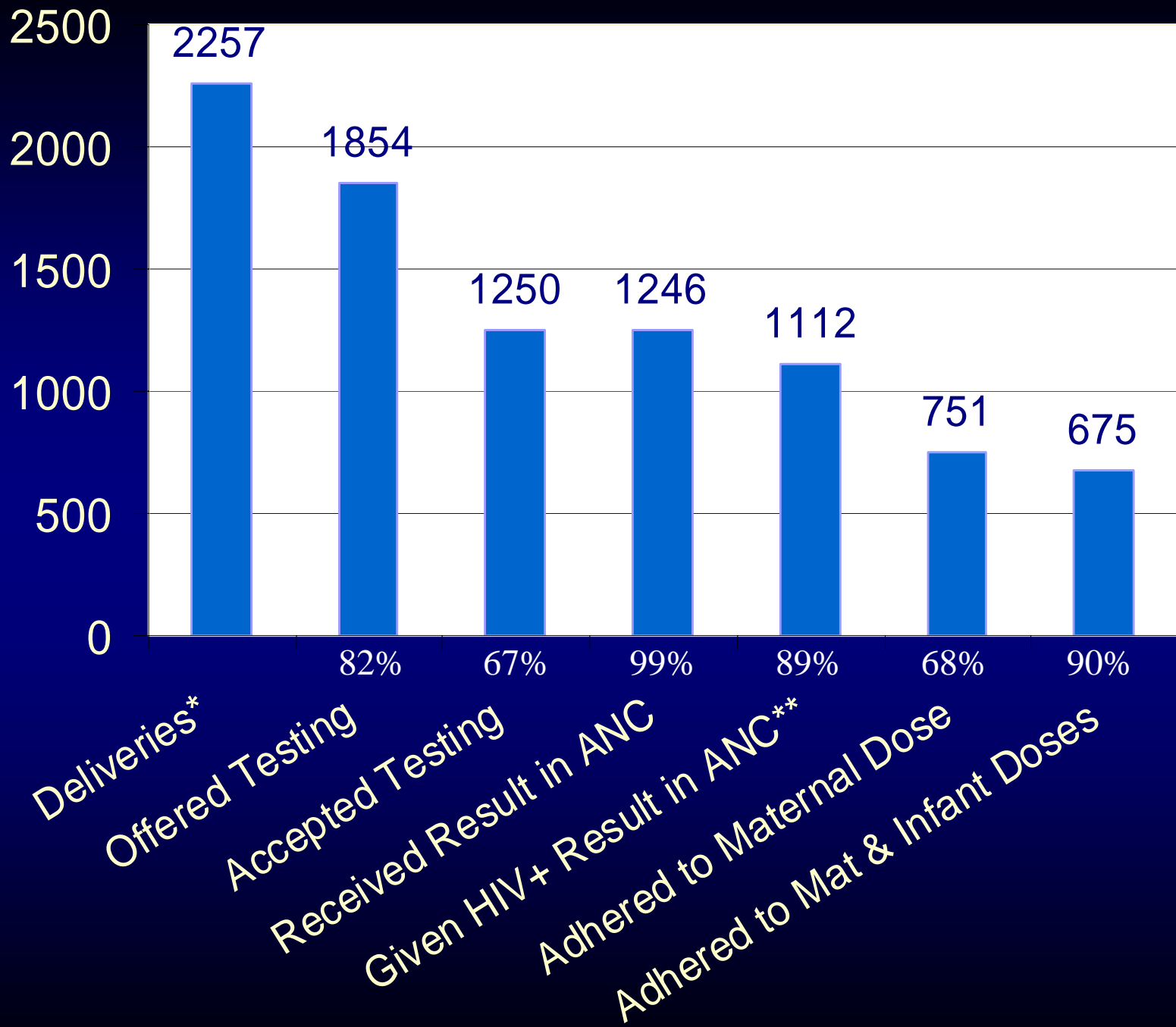
86%

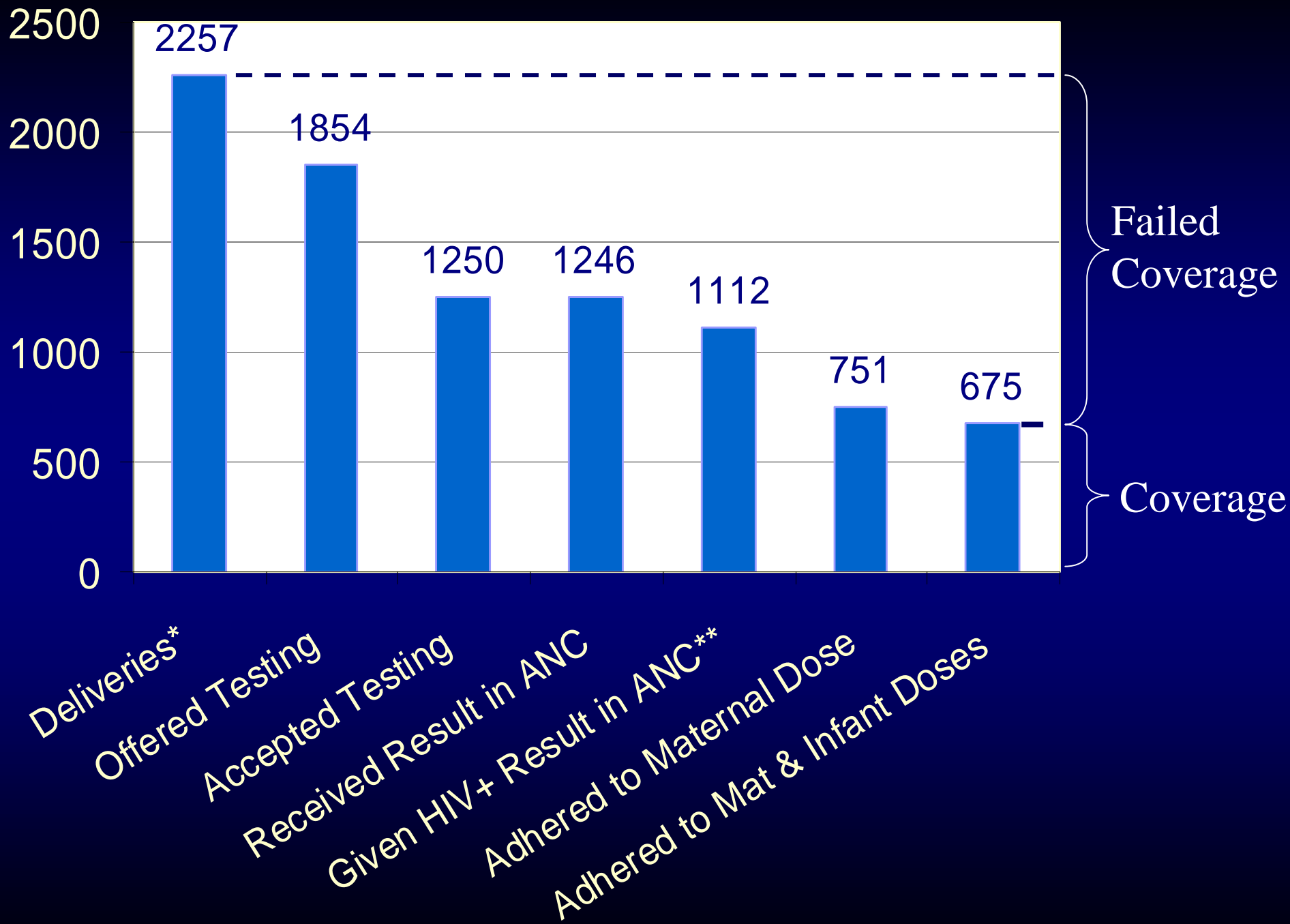


- 6,530 Cord Blood HIV Negative**

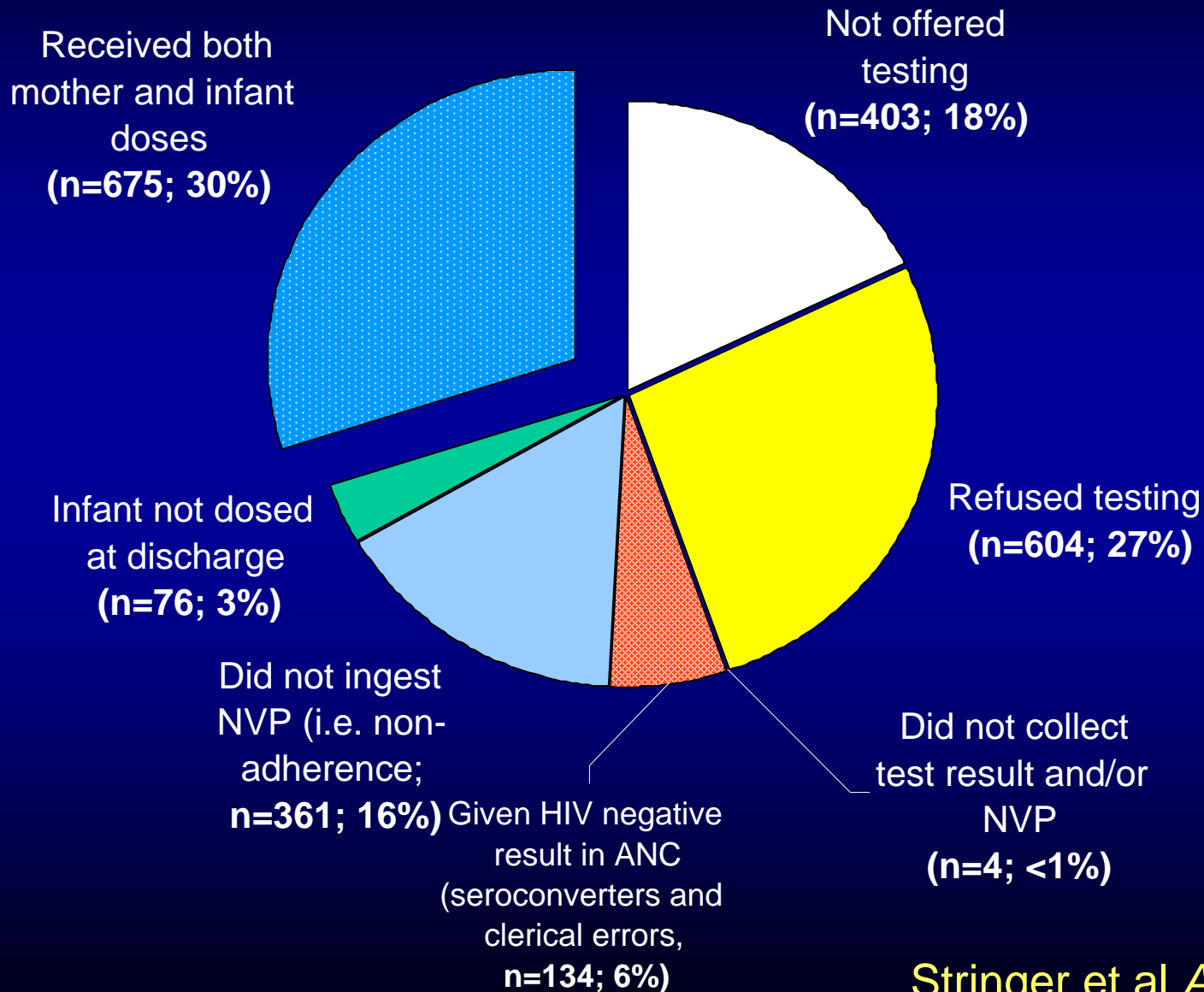
2,257 Cord Blood HIV Positive

26%





NVP coverage in 2257 cord blood seropositive mothers and infants



Conclusion

- PMTCT is an urgent issue
- Some sites are able to do more complex interventions, while others are not
- Do not allow “better to be the enemy of good”