

Prevention of Mother To Child HIV Transmission - Global Gaps and Potential Solutions

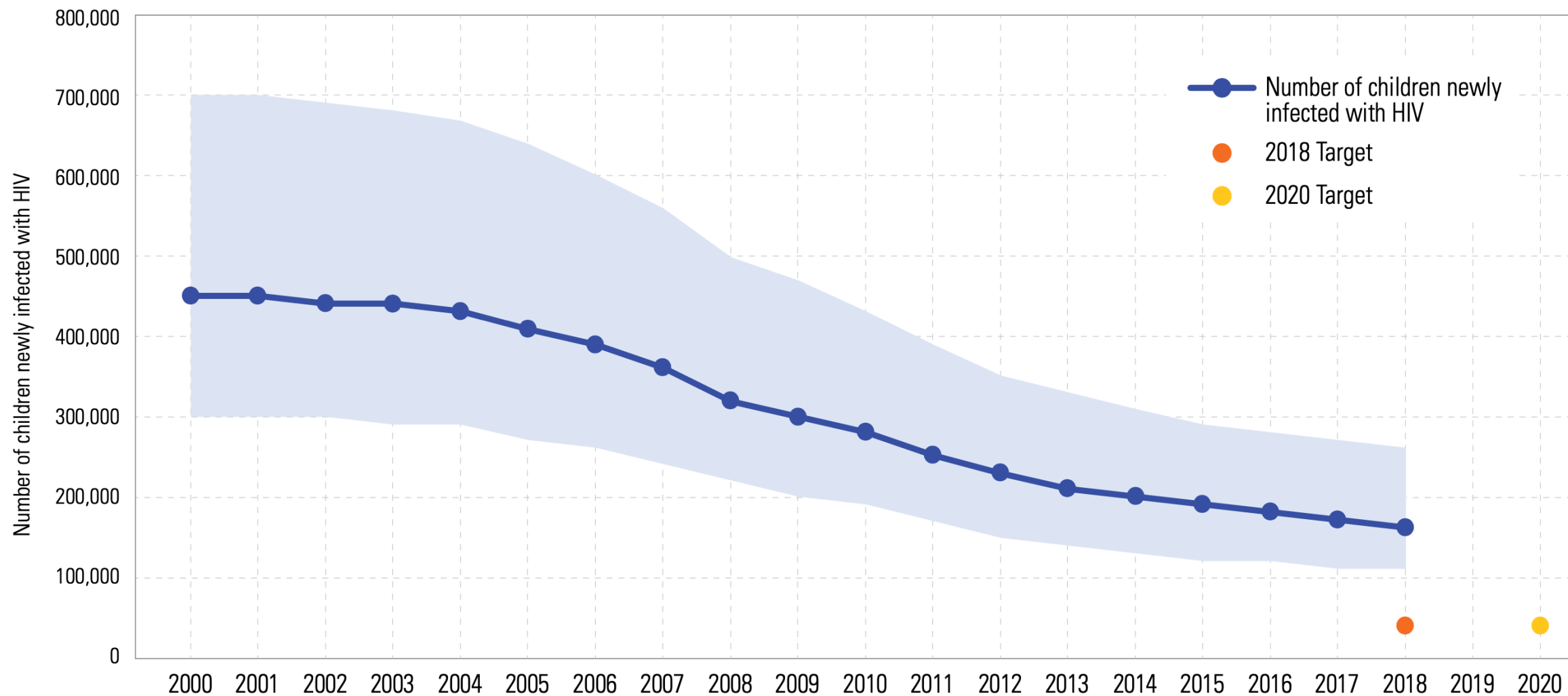
Benjamin Chi, MD, MSc
University of North Carolina,
United States



Prevention of mother-to-child HIV transmission: Global gaps and potential solutions

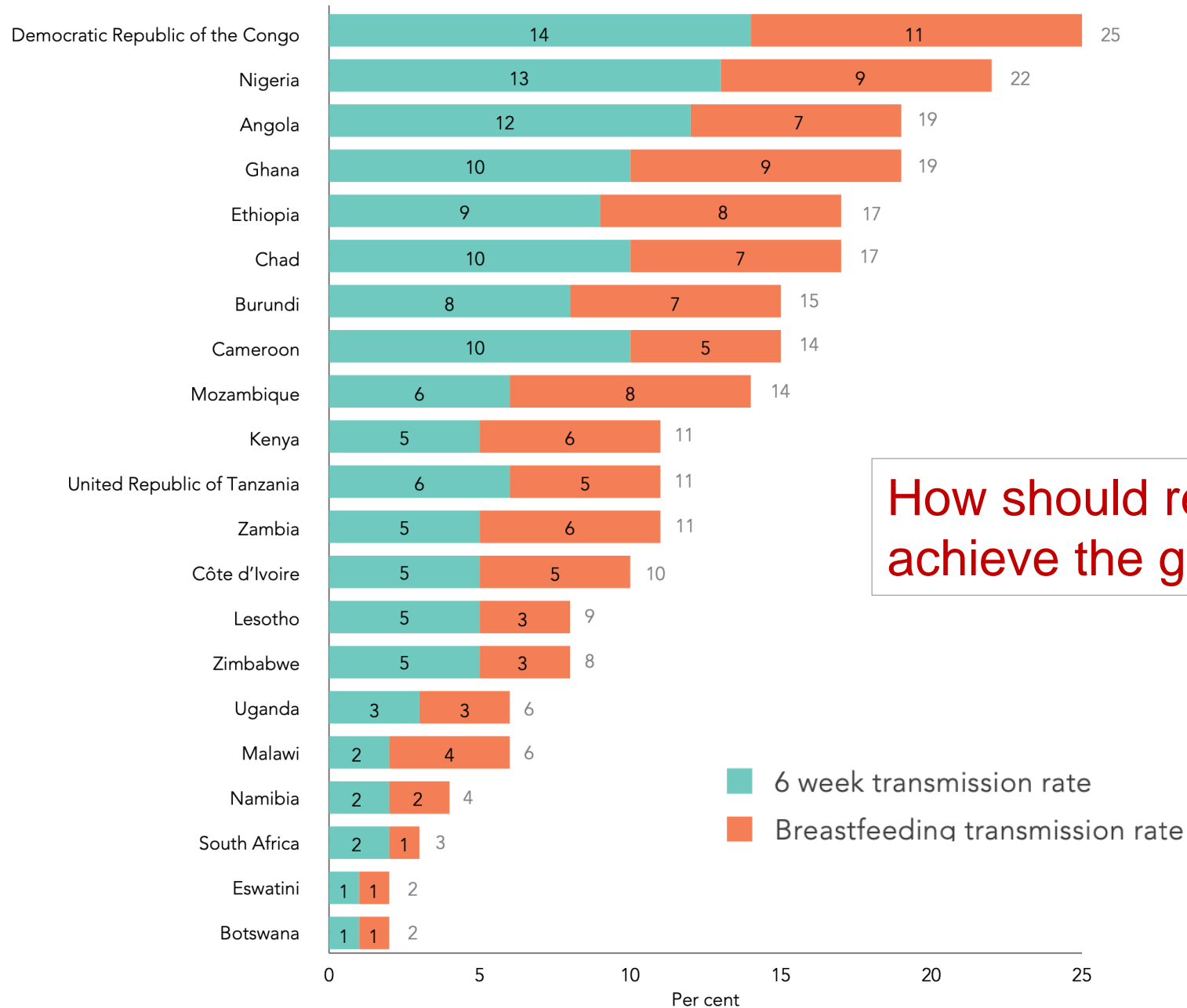
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Children aged 0–14 years newly infected with HIV in 23 focus countries, 2000–2018, and 2018 and 2020 targets



Source: UNAIDS 2019 estimates.

Six-week vertical transmission rate and final transmission rate in the focus countries, 2019



How should resources be targeted to achieve the goals of EMTCT?

Road map to the *Last Mile to EMTCT*



STEPS	ACTIVITIES
1 Developing a consultative process	<ul style="list-style-type: none">● Identify a country team to drive assessment and planning processes
2 Taking stock of progress and remaining gaps in PMTCT	<ul style="list-style-type: none">● Conduct a missed opportunity analysis● Characterize and contextualize programmatic gaps using data from other sources
3 Planning and prioritizing	<ul style="list-style-type: none">● Articulate the priority factors necessary for programmatic change● Prioritize interventions according to gaps and contextual factors● Seek broader stakeholder engagement and finalize strategies, guidelines and/or policies
4 Implementing, monitoring and evaluating for PMTCT	<ul style="list-style-type: none">● Disseminate planned strategies, guidelines and/or policies● Monitor and evaluate implemented interventions

Identifying missed opportunities: Spectrum stacked bar analysis

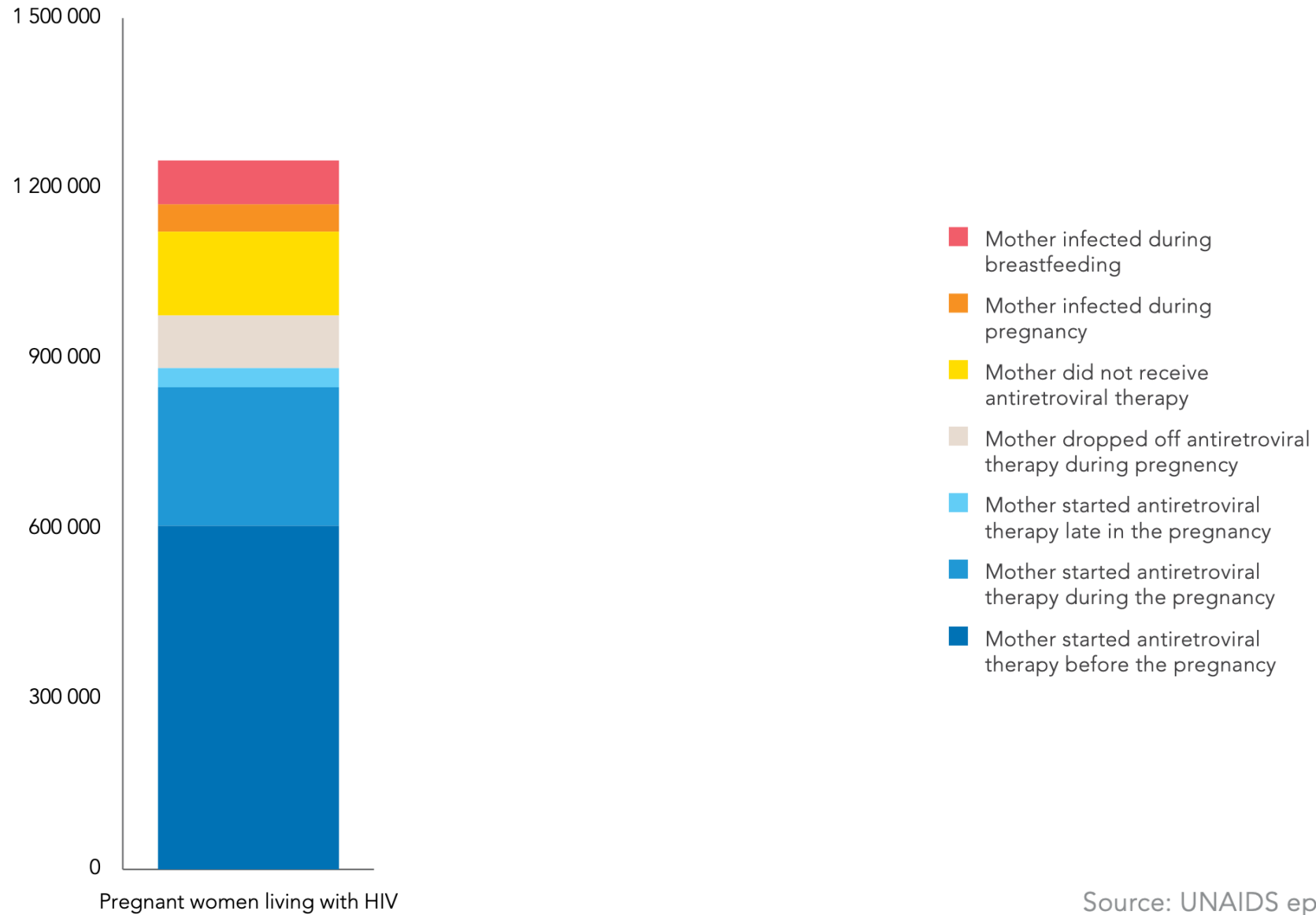
missed opportunity

Determined from new pediatric
HIV cases

What services were received?

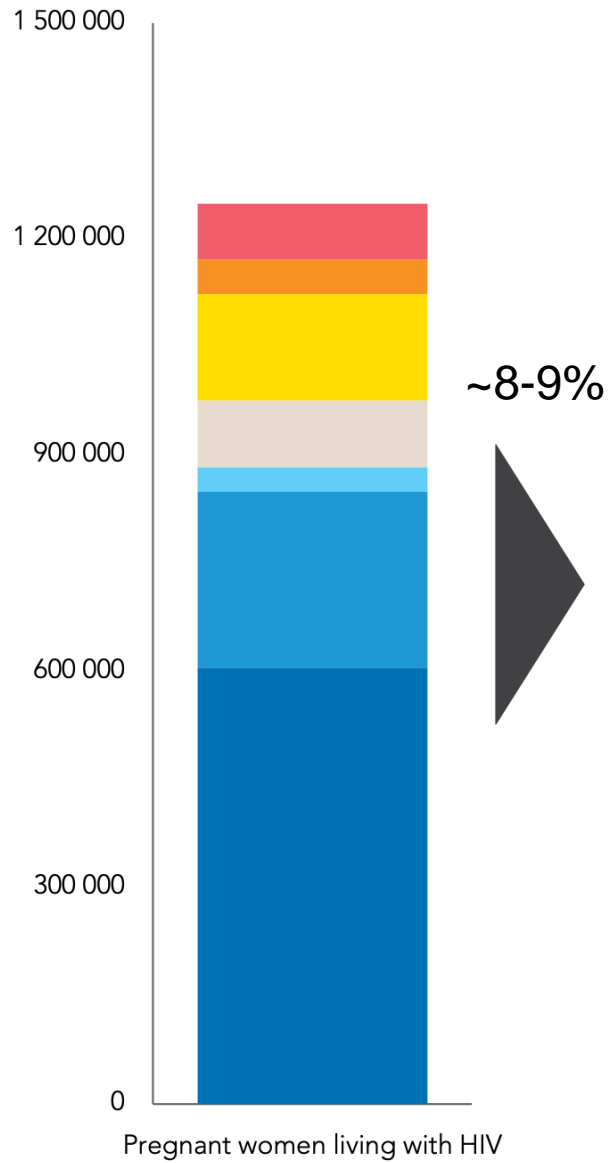
(Stacked bar analysis)

Number of pregnant or breastfeeding women by prevention opportunity

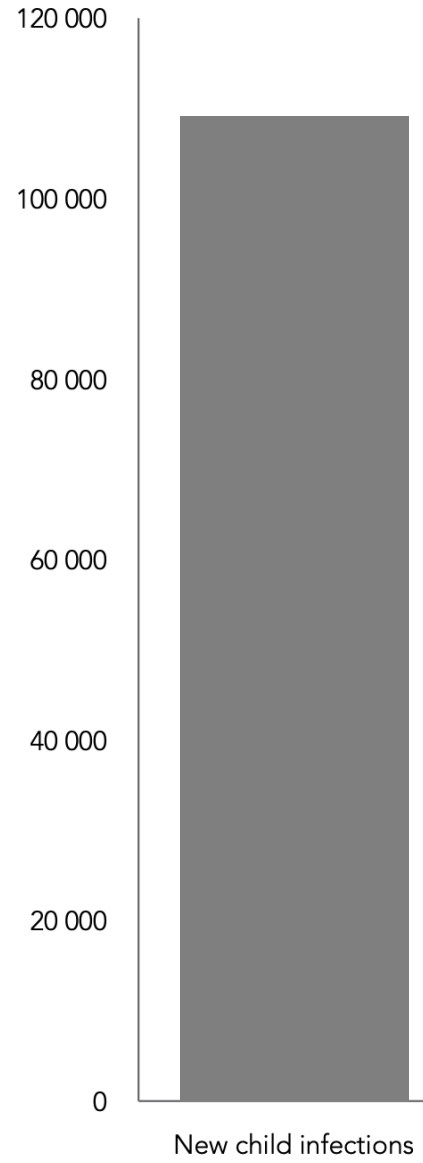


Source: UNAIDS epidemiological estimates, 2020.

Number of pregnant or breastfeeding women by prevention opportunity

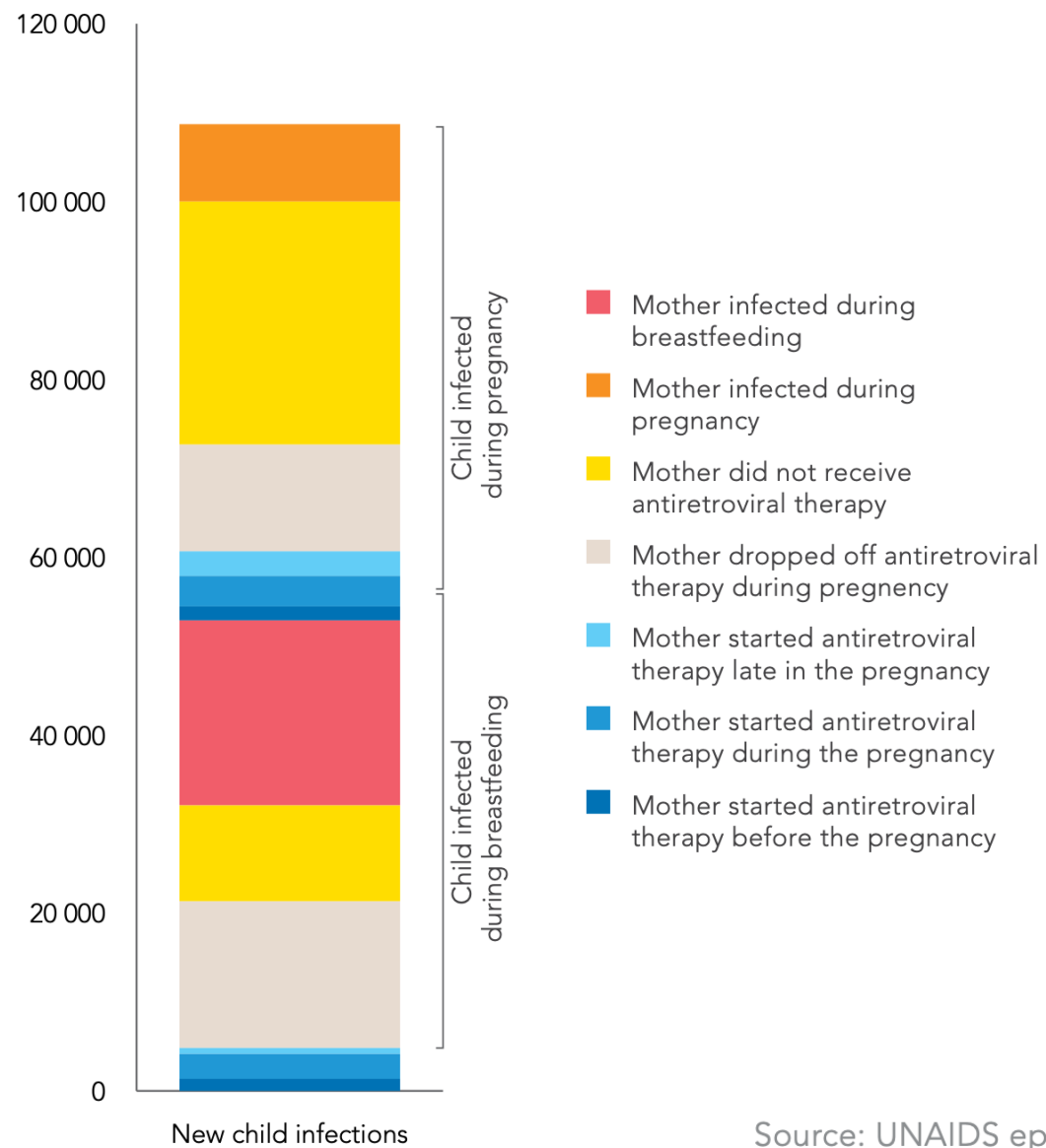


Number of new child infections by missed prevention opportunity

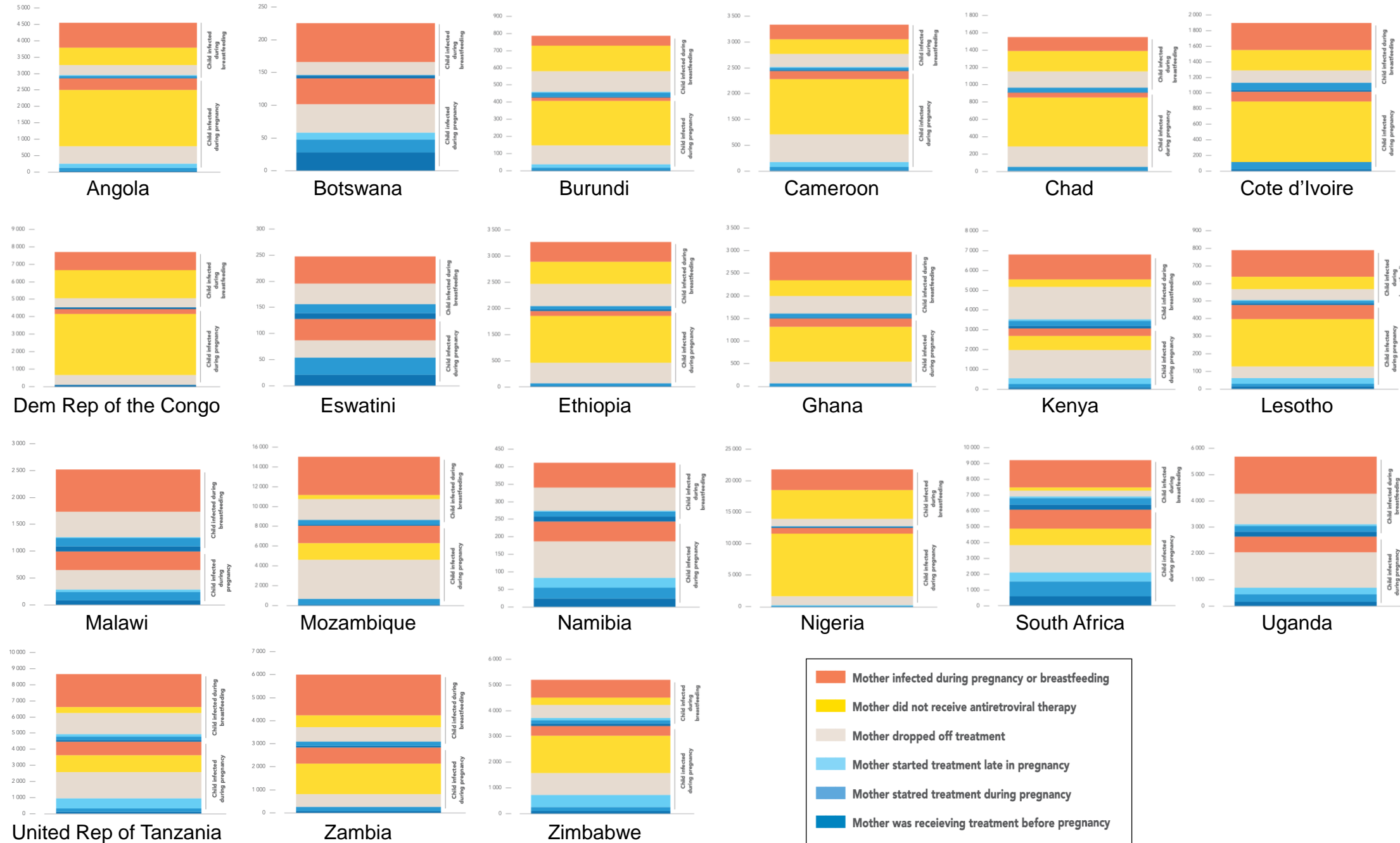


- Mother infected during breastfeeding
- Mother infected during pregnancy
- Mother did not receive antiretroviral therapy
- Mother dropped off antiretroviral therapy during pregnancy
- Mother started antiretroviral therapy late in the pregnancy
- Mother started antiretroviral therapy during the pregnancy
- Mother started antiretroviral therapy before the pregnancy

Number of new child infections by missed prevention opportunity

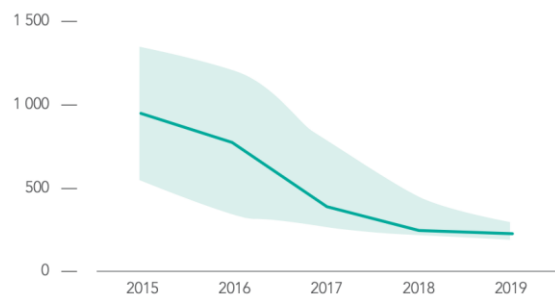


Source: UNAIDS epidemiological estimates, 2020.

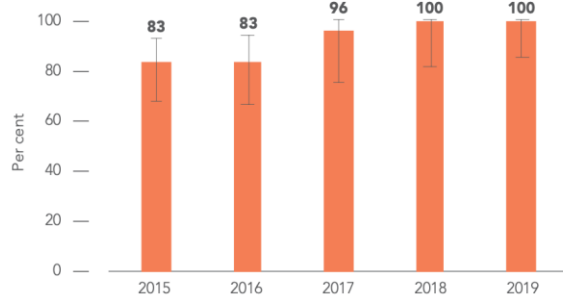


Country profile: Botswana

New HIV infections among children, 2015-2019



Antiretroviral therapy coverage among pregnant women living with HIV, 2015-2019



Six week and final (after breastfeeding) vertical HIV transmission rate, 2015 and 2019



Six week transmission

2015
4% [2-5%]
2019
1% [1-1%]



Final transmission

2015
7% [5-9%]
2019
2% [2-2%]

Percent of pregnant women who had at least one antenatal visit, most recent survey



Not available

Percent of HIV-exposed infants who received a virological test for HIV within 2 months of birth, 2015 and 2019



2015
44% [39-53%]
2019
85% [75-100%]

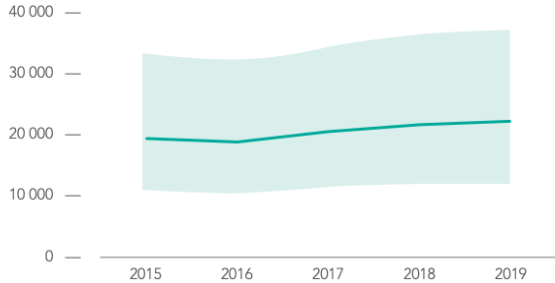


- Mother infected during pregnancy or breastfeeding
- Mother did not receive antiretroviral therapy
- Mother dropped off treatment
- Mother started treatment late in pregnancy
- Mother started treatment during pregnancy
- Mother was receiving treatment before pregnancy

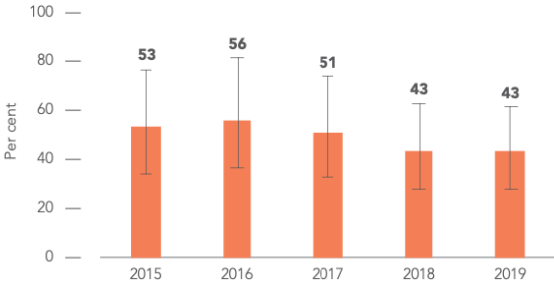
Source: UNAIDS epidemiological estimates, 2020.

Country profile: Nigeria

New HIV infections among children, 2015-2019



Antiretroviral therapy coverage among pregnant women living with HIV, 2015-2019



Six week and final (after breastfeeding) vertical HIV transmission rate, 2015 and 2019



Six week transmission

2015
11% [8–13%]
2019
13% [10–16%]



Final transmission

2015
20% [16–24%]
2019
22% [18–27%]

Percent of pregnant women who had at least one antenatal visit, most recent survey

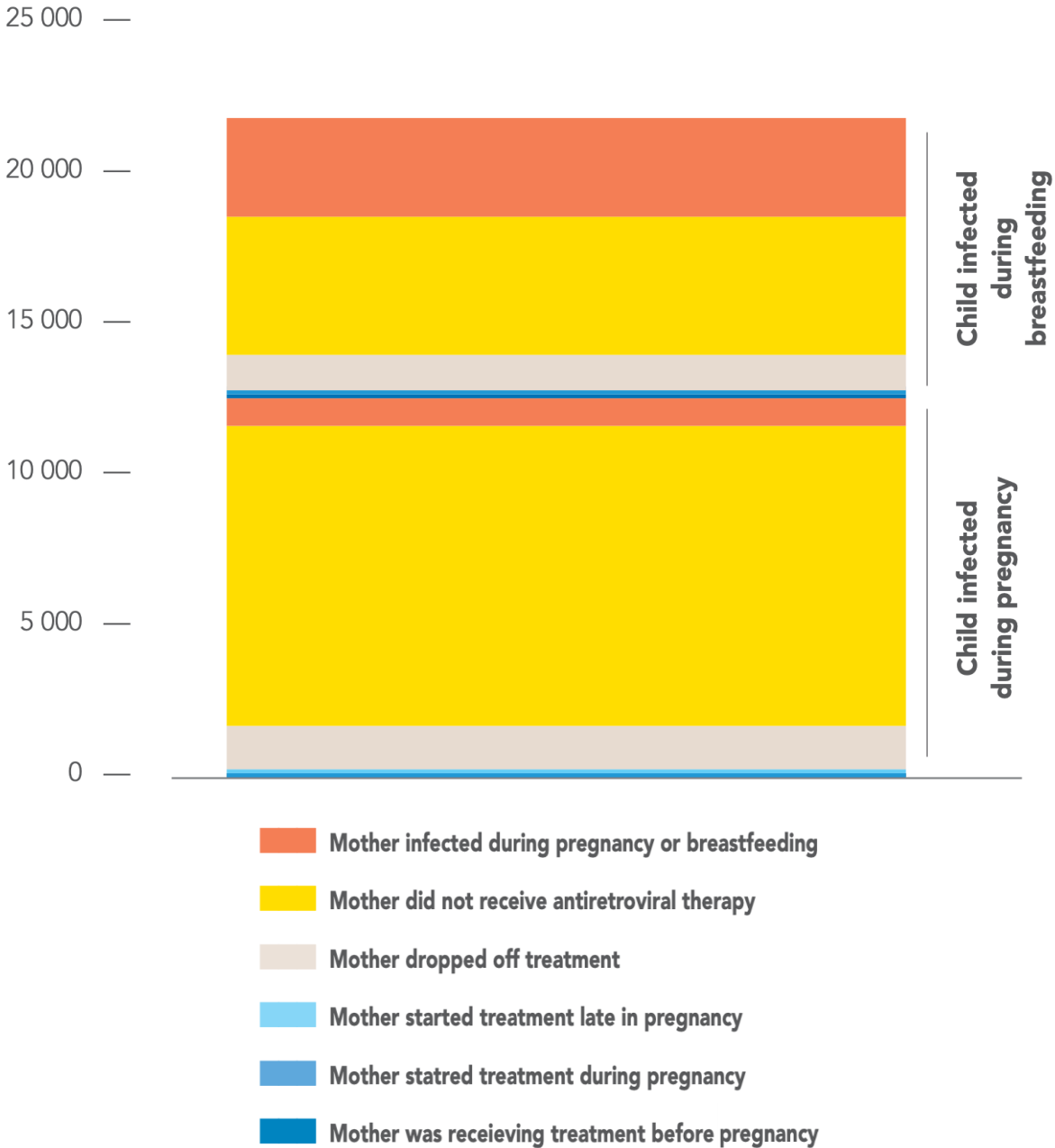


2018
76%

Percent of HIV-exposed infants who received a virological test for HIV within 2 months of birth, 2015 and 2019



2015
16% [11–25%]
2019
27% [18–41%]



Source: UNAIDS epidemiological estimates, 2020.

Determining programmatic gaps: The PMTCT cascade

missed opportunity *vs.* **programmatic gap**

Determined from new pediatric
HIV cases

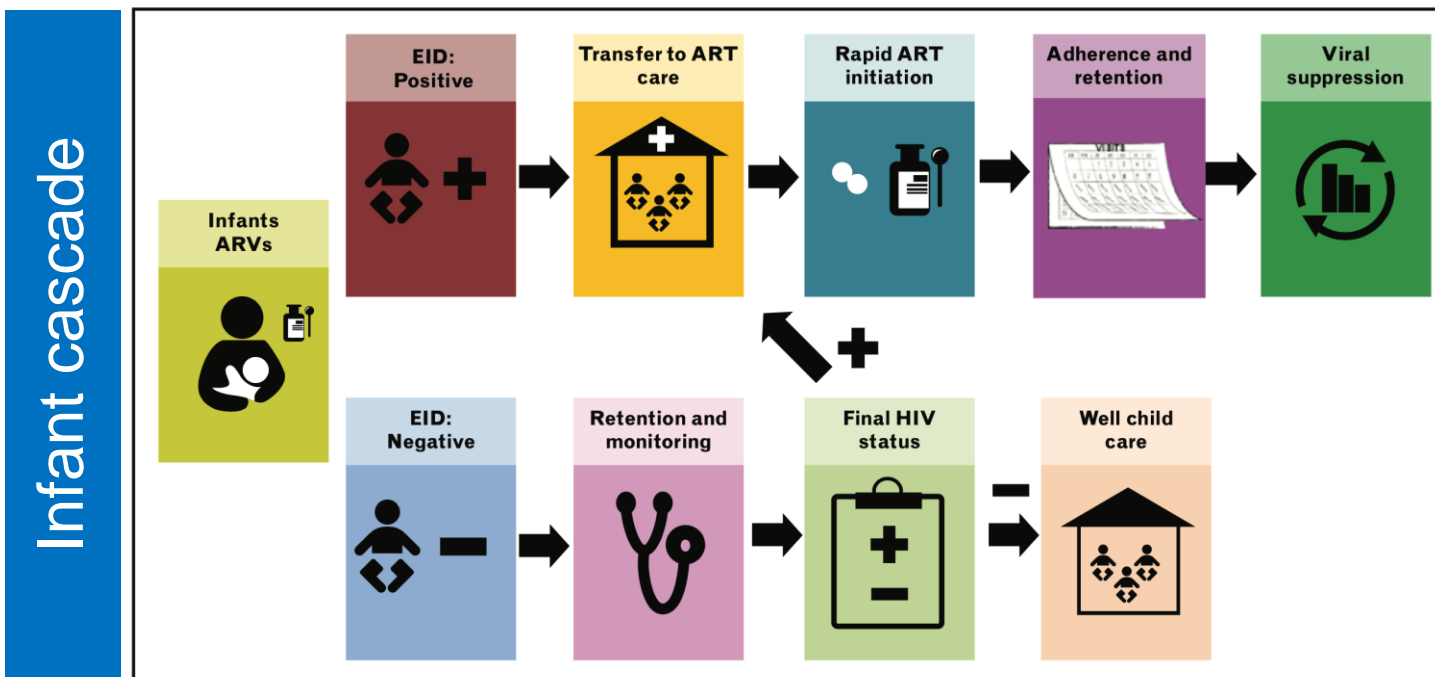
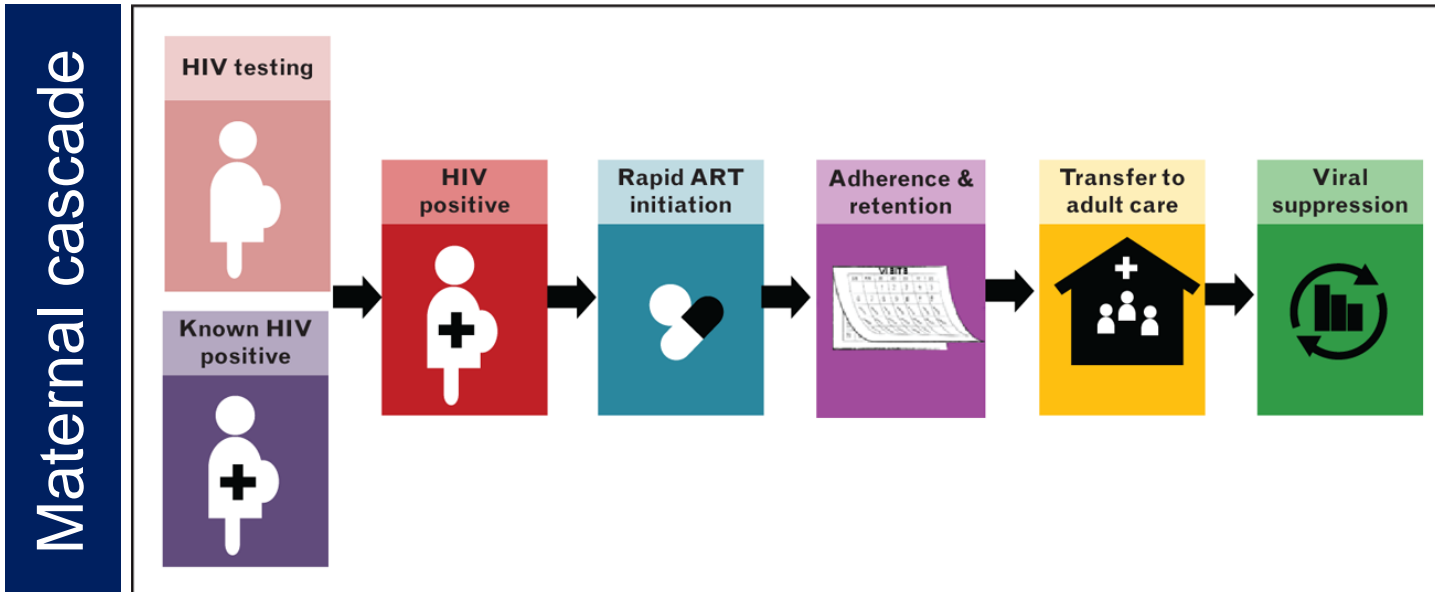
What services were received?

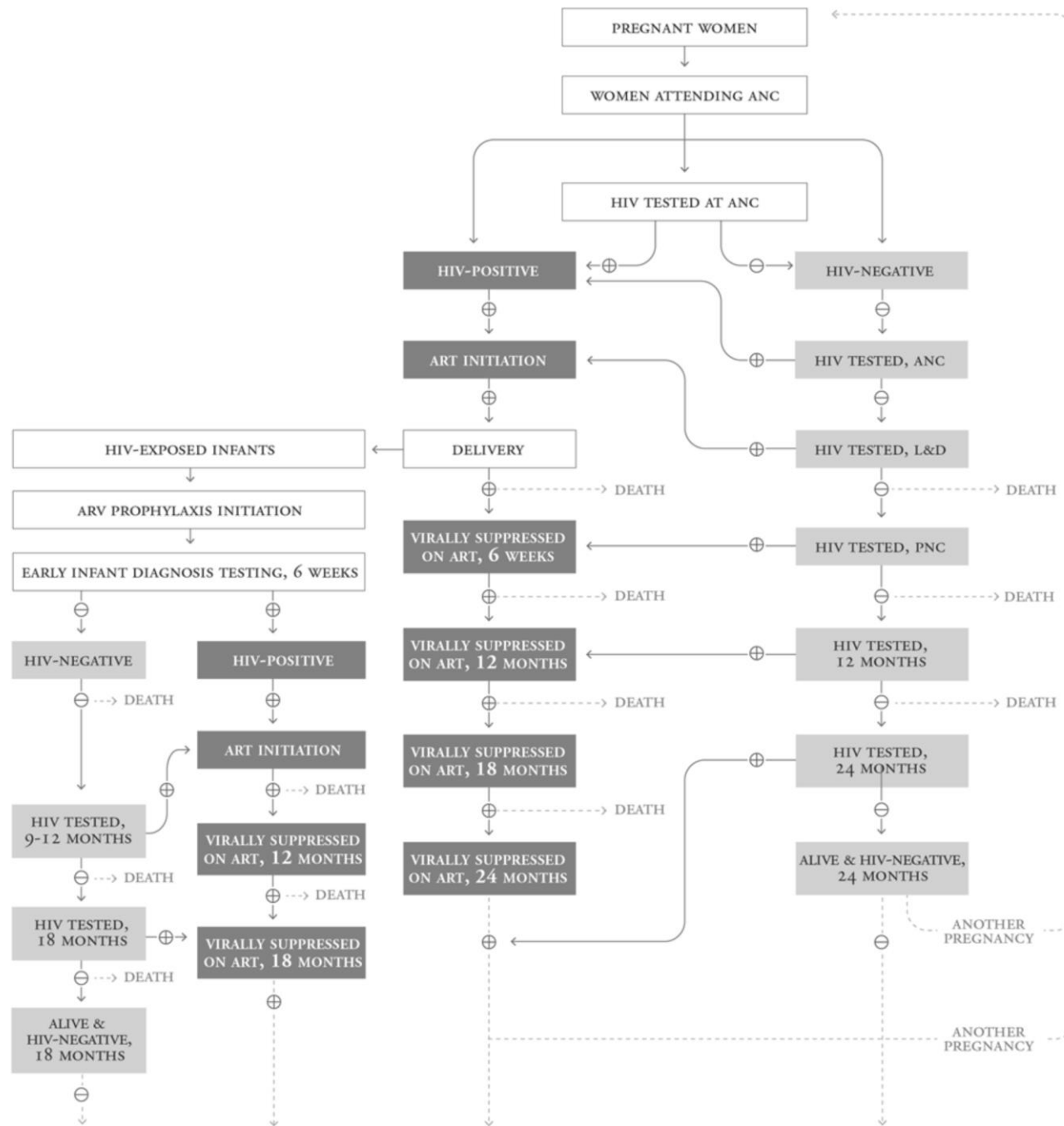
(Stacked bar analysis)

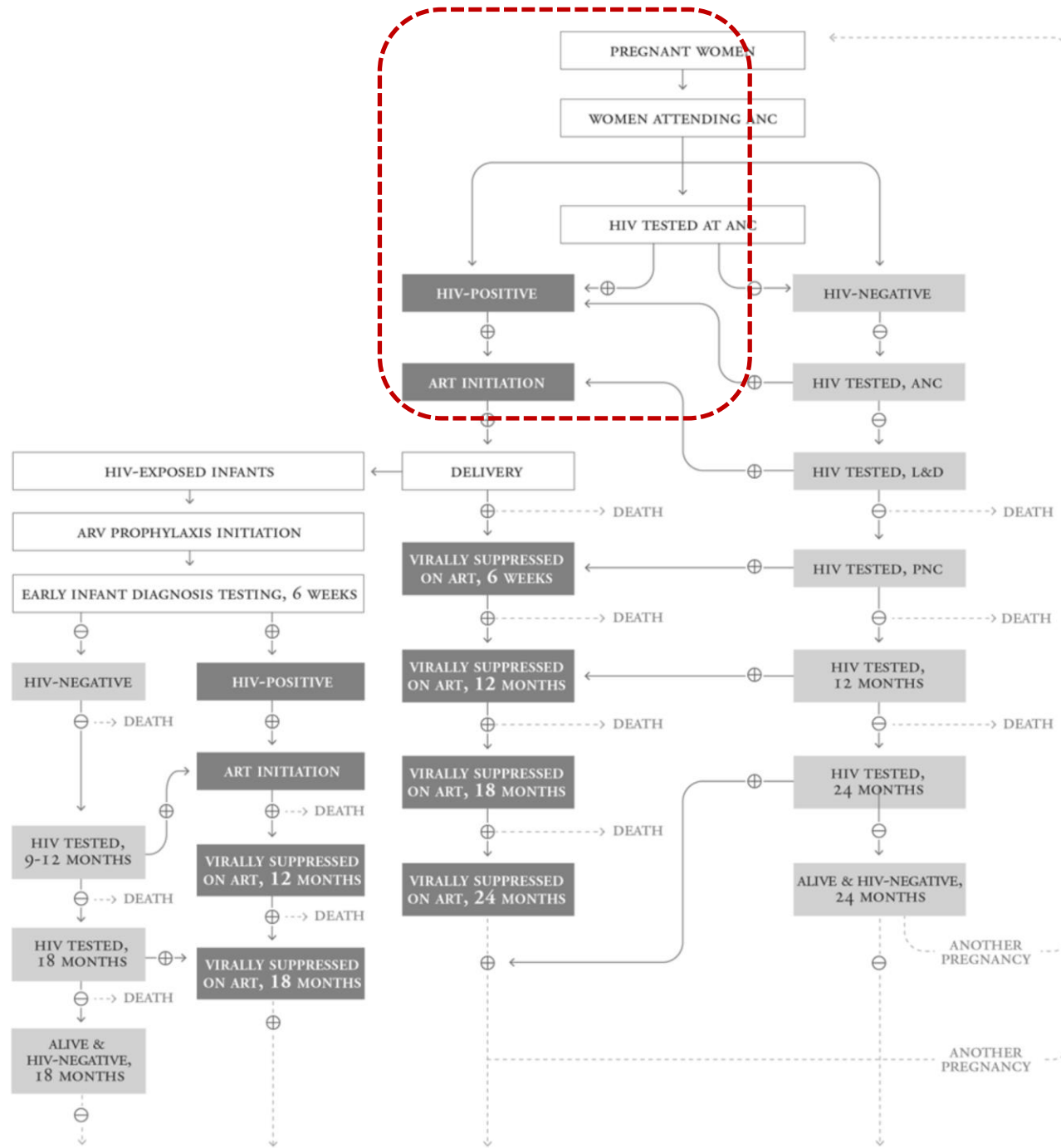
Focused on health service
provision

Why weren't services delivered?

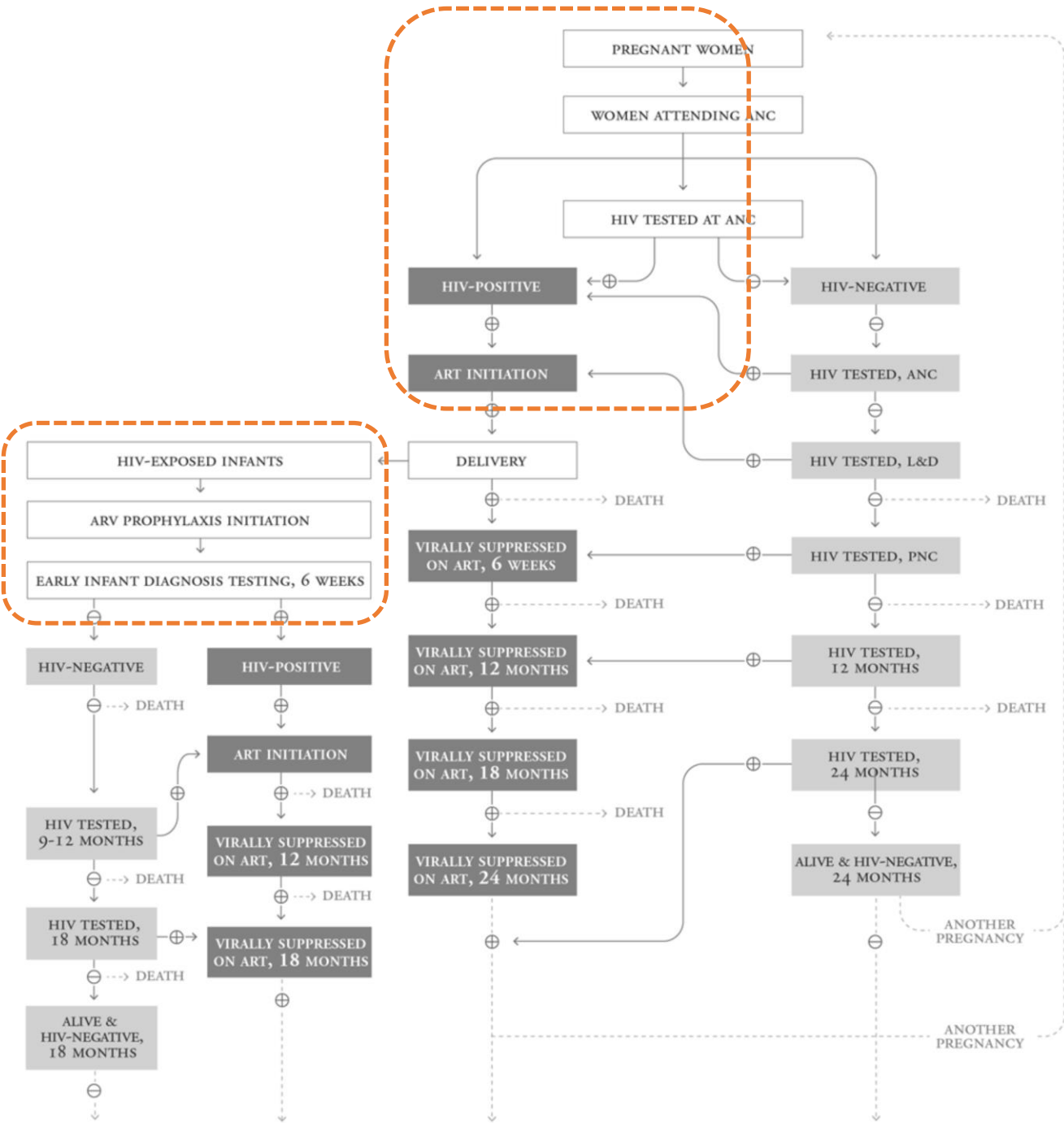
(PMTCT cascade)





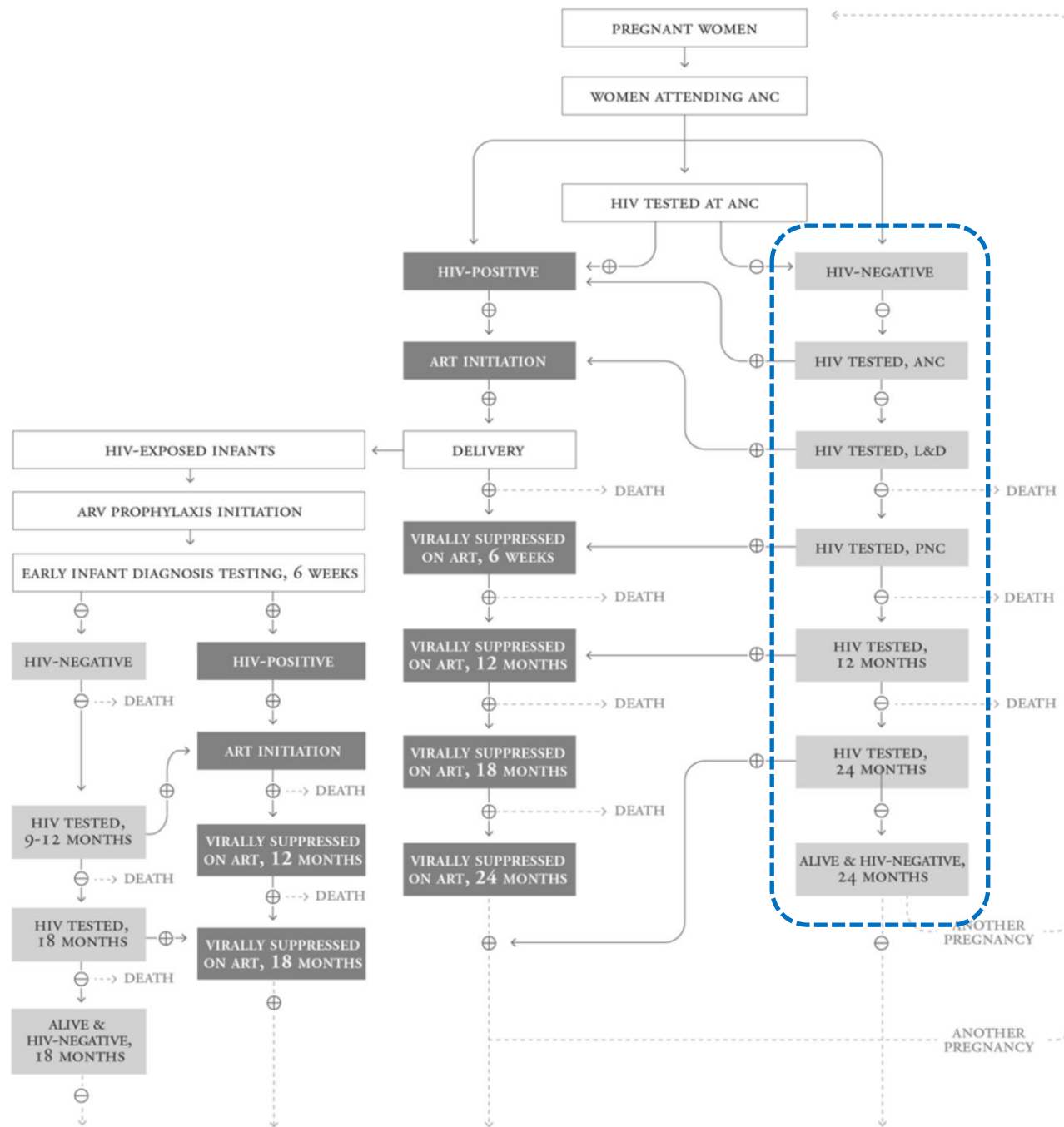


Mother did not receive antiretroviral therapy



Mother did not receive antiretroviral therapy

Mother started treatment late in pregnancy



Mother did not receive antiretroviral therapy

Mother started treatment late in pregnancy

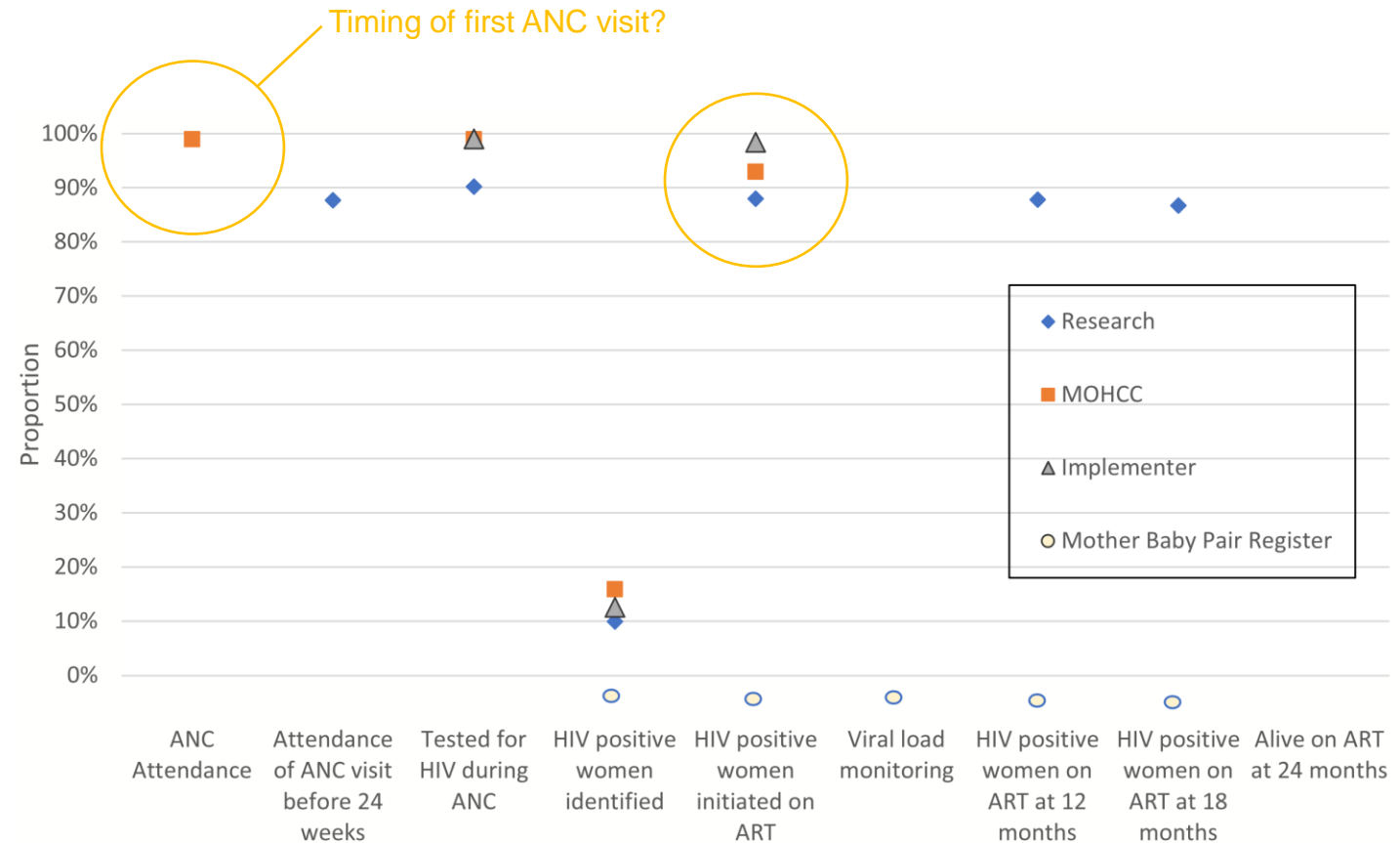
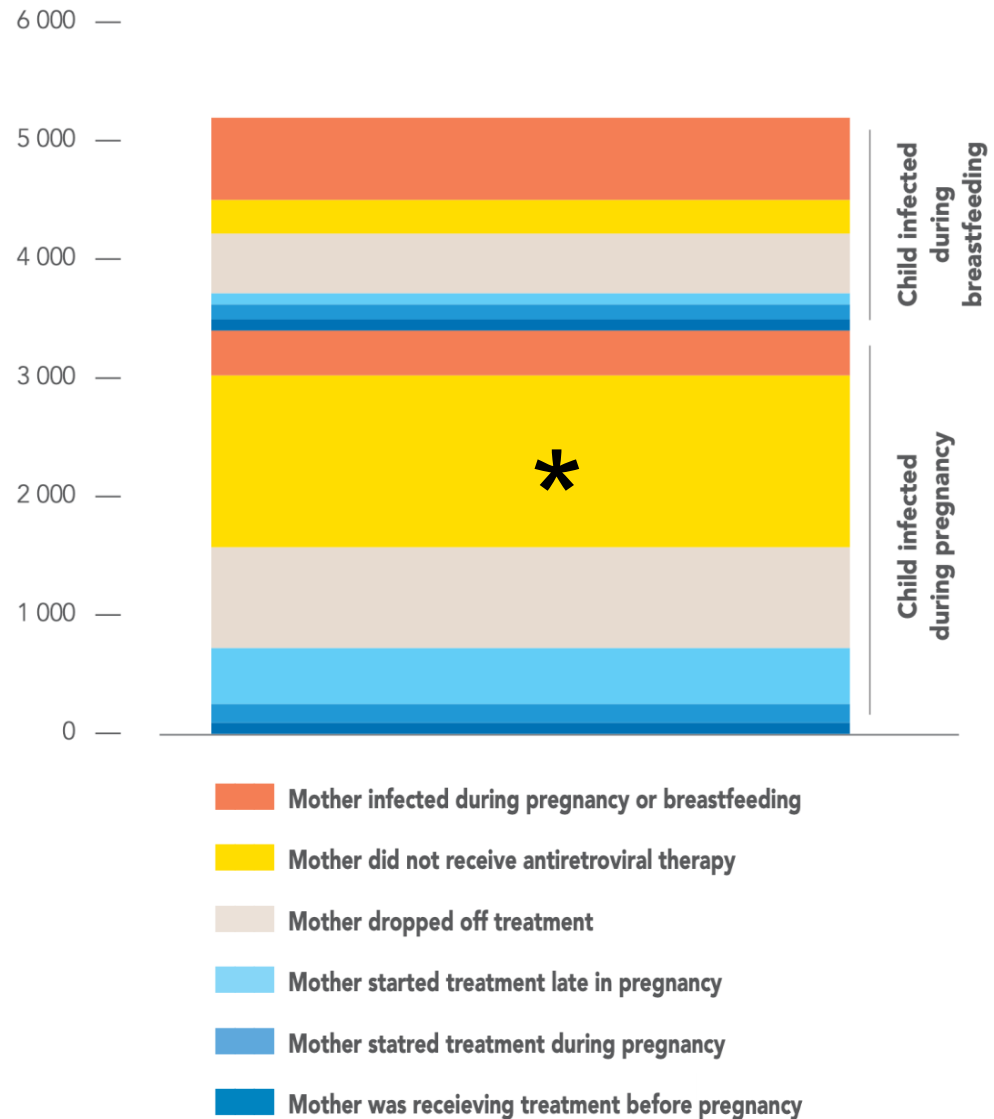
Mother dropped off treatment

Mother started treatment during pregnancy

Mother was receiving treatment before pregnancy

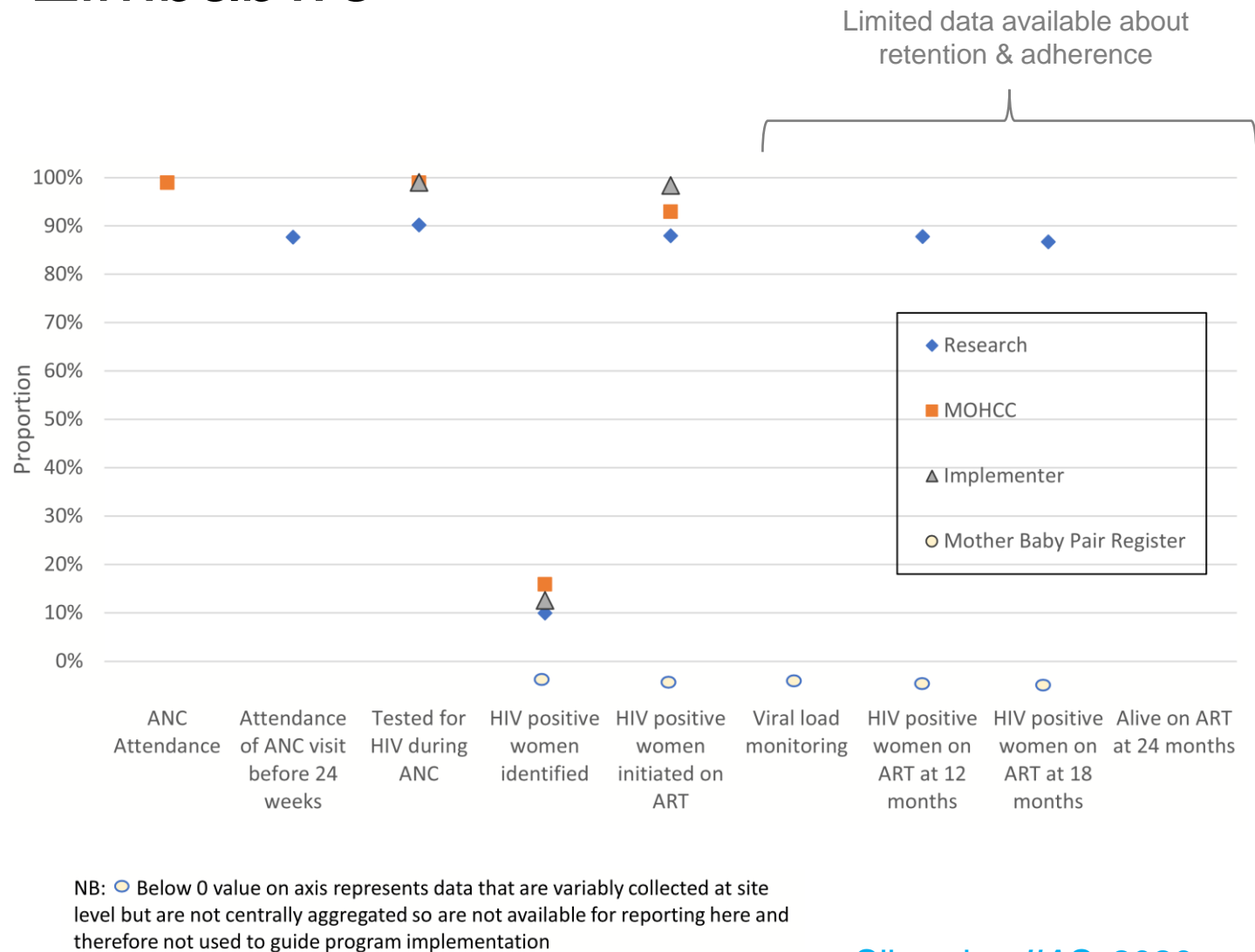
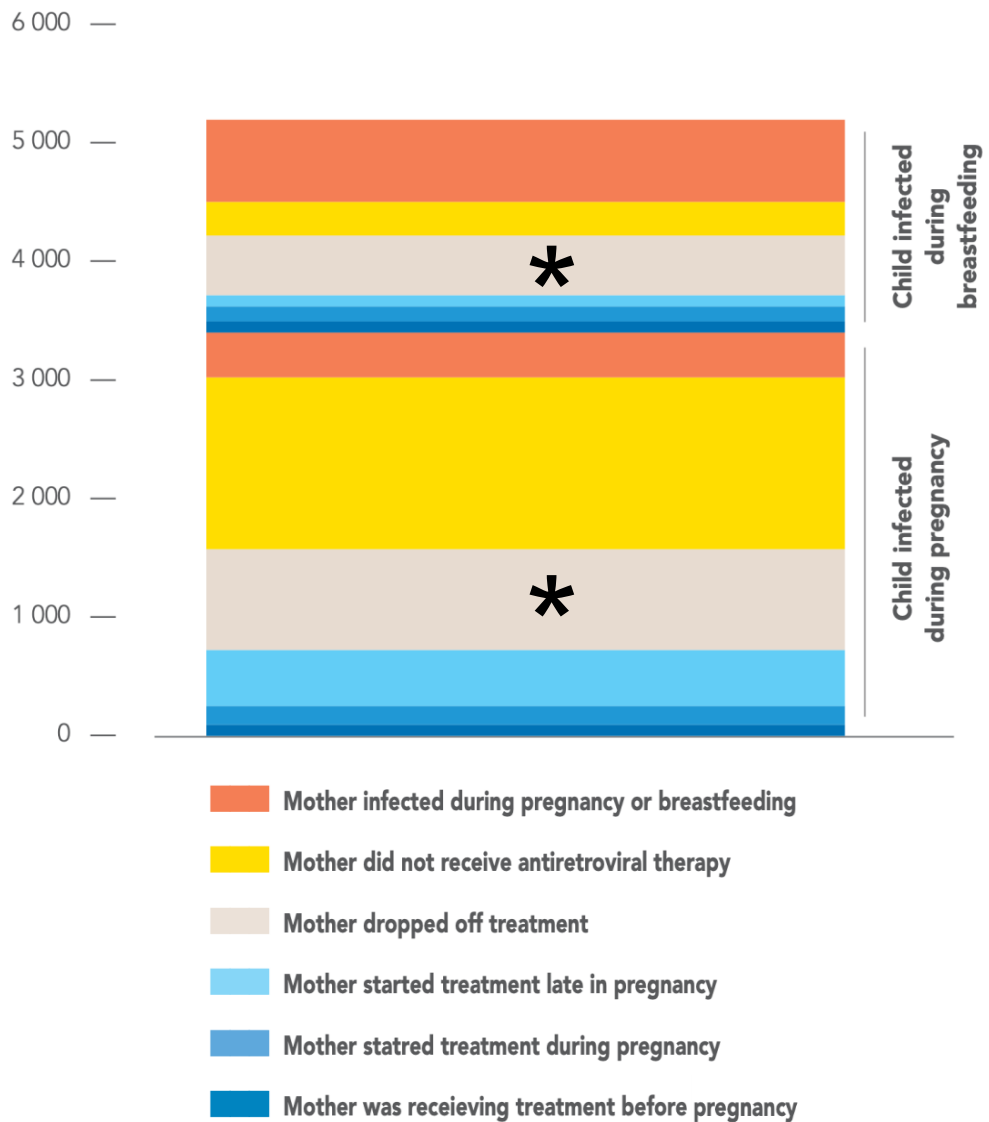
Mother infected during pregnancy and breastfeeding

Mapping missed opportunities to PMTCT cascades: Zimbabwe



NB: ○ Below 0 value on axis represents data that are variably collected at site level but are not centrally aggregated so are not available for reporting here and therefore not used to guide program implementation

Mapping missed opportunities to PMTCT cascades: Zimbabwe



Prioritizing PMTCT strategies and interventions: Addressing the gaps

MISSED OPPORTUNITIES FOR EMTCT

Mothers infected during pregnancy or breastfeeding **A** **B** **F**

Mothers did not receive ART during pregnancy or breastfeeding **B** **C** **E** **F**

Mothers dropped off ART during pregnancy or breastfeeding **D** **F**

Mothers started ART late in pregnancy **B** **C** **D** **E** **F**

Mothers started ART during pregnancy **B** **C** **D** **E**

Mothers started ART before pregnancy **D**

INTERVENTION DOMAINS

A HIV prevention services for women

B Timely access to HIV testing

C Timely ART initiation

D Programme retention and adherence support

E Timely engagement in antenatal care

F Services for infants at highest risk of HIV acquisition

A HIV prevention services for women

Partner HIV testing strategies

Index testing / partner notification **PG**

Home-based HIV testing **AE**

HIV self-testing **PG**

Campaign-based HIV testing **AE**

Education, counseling, and support **AE**

ART initiation and adherence support for male partners **P**

PrEP during pregnancy and breastfeeding **PG**

B Timely access to HIV testing

Provider-initiated HIV testing **PG**

Repeat HIV testing during pregnancy and breastfeeding **PG**

C Timely ART initiation

Integrated ART-MCH services **PG**

Same-day ART initiation **PG**

Community-based ART initiation **AE**

D Programme retention and adherence support

Peer support (e.g., mentor mothers) **AE**

Community health worker support **AE**

Facility- or community-based support groups **AE**

Text (SMS) reminders **AE**

Viral load monitoring in third trimester and breastfeeding **P**

E Timely engagement in antenatal care

Access to urine pregnancy tests in early gestation **P**

Community health worker engagement **AE**

Financial or non-financial incentives **AE**

Group antenatal care **AE**

Text (SMS) reminders **AE**

F Services for infants at highest risk of HIV acquisition

Birth HIV testing **AE**

Extended infant HIV prophylaxis **PG**

P promising strategy

AE available evidence

PG policy guidelines

Potential prioritization factors

Strength of evidence / magnitude of impact

Cost & cost-effectiveness

Scalability & sustainability

Equity and human rights

Intervention characteristics:

- Setting (e.g., clinic vs. community)
- Health infrastructure, including human resources
- Technology requirements

Take stock

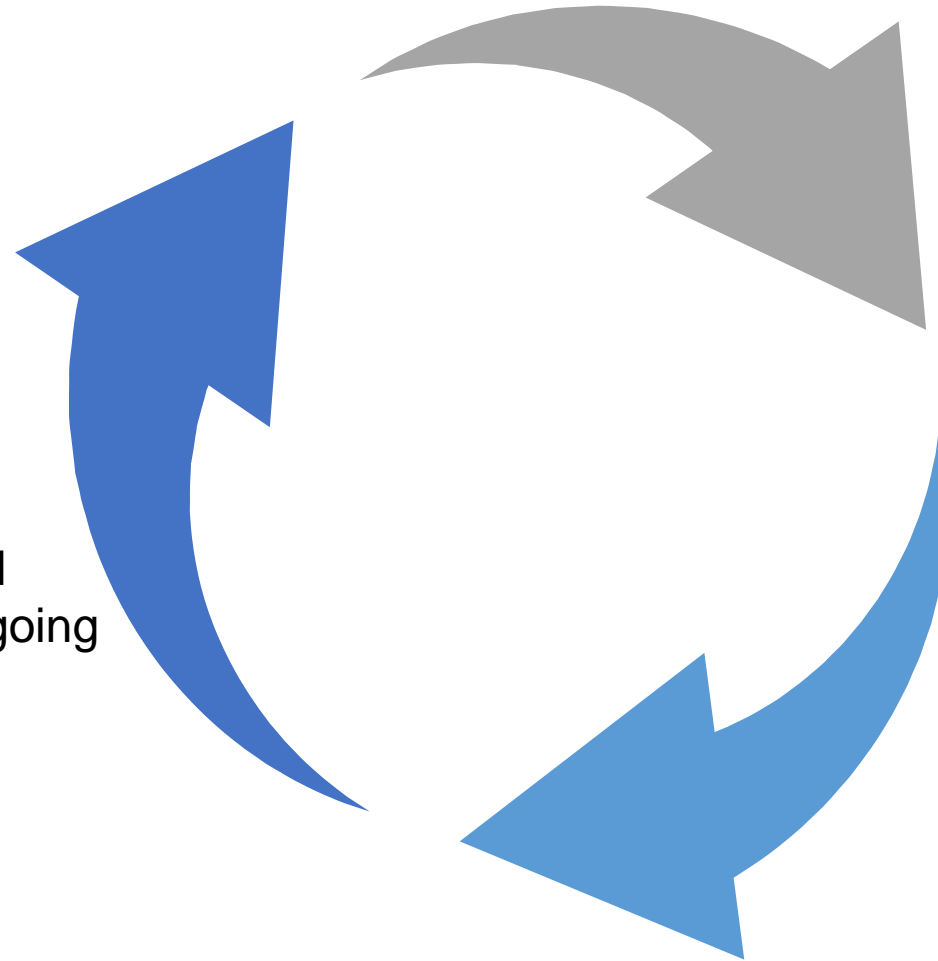
Identify the main program gaps. Gain insight into the local HIV epidemic, policy landscape, and programmatic context.

Prioritize and plan

Prioritize and plan for key interventions based on local needs.

Implement

Implement interventions and program strategies, with ongoing quality improvement.



Summary & key take-aways

- Missed opportunities for PMTCT vary by setting
- Data-driven processes can help to optimize EMTCT investments
- Structured approaches are needed to prioritize programmatic gaps and their potential solutions
- Program improvement is cyclic and requires ongoing monitoring and evaluation
- Tailored responses are needed to reach the ambitious targets of EMTCT

