



Innovative Targeted Testing Approaches: Finding the Missing Children.

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PATA 2024 SUMMIT

Presentation Outline

Statistics on Paediatric HIV and AIDS

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- HIV Testing in Global Alliance countries
- Global Alliance to End AIDS by 2030 Testing priorities
- Targeted and Adaptable strategies to find missing children
- HIV Estimates in Mozambique



Targeting Testing Approaches

2

- Health Facility-based Testing
- Community-based testing
- Index Case Testing



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Testing Results (1st Semester 2024)

- 95-95-95 Cascade



4

Challenges



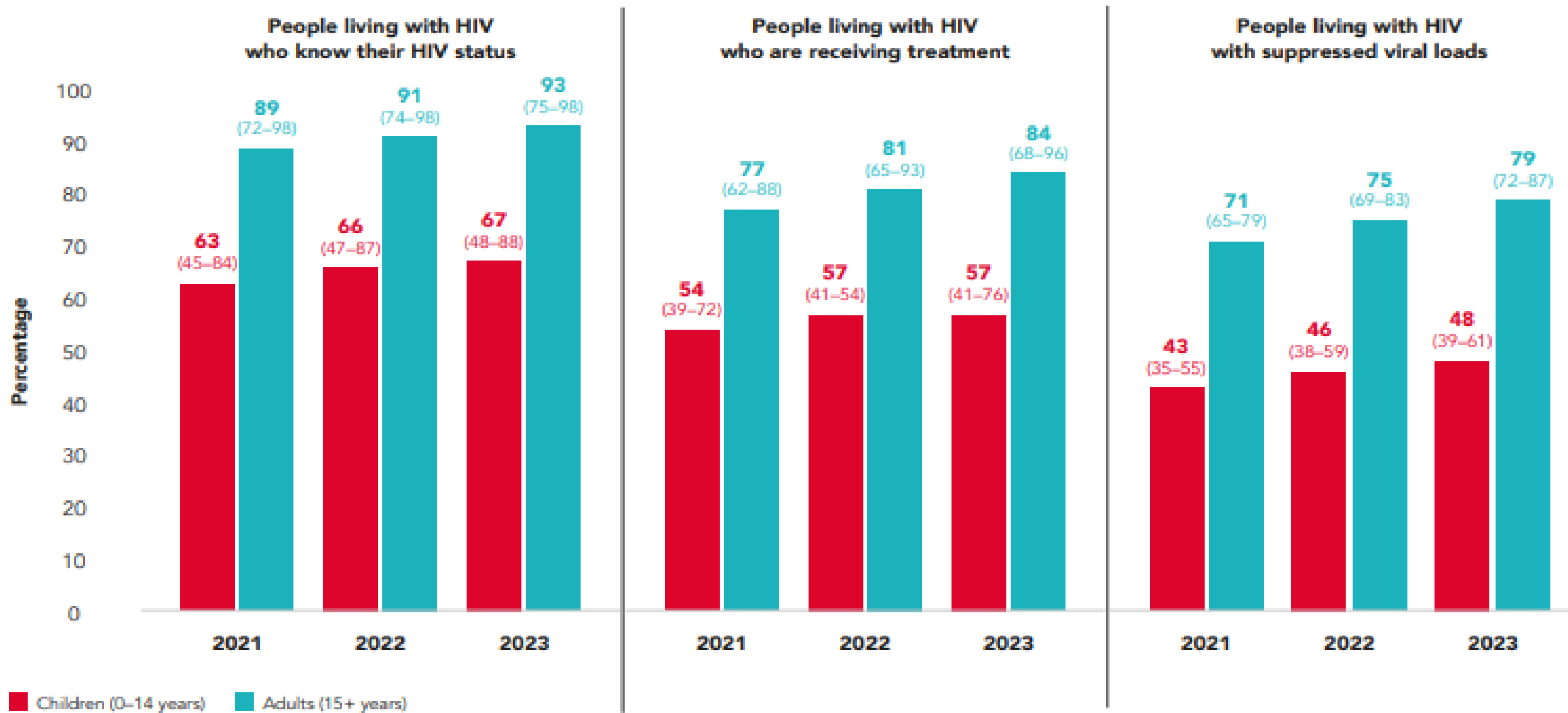
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Way forward



HIV testing and treatment cascade for children (0–14 years old) and adults (15+ years old): from 2021 to 2023 (Global Alliance countries)

- Shows incremental progress but not anywhere near the real shifts needed!



Angola, Cameroon, Cote d'Ivoire, Democratic Republic of Congo, Kenya, Mozambique, Nigeria, South Africa, Tanzania, Uganda, Zambia, Zimbabwe

Source: UNAIDS special analysis of epidemiological estimates, 2024.



Global Alliance to End AIDS in Children and Adolescents by 2030

Breaking down testing priorities across 4 pillars

Testing priorities of the Global Alliance across 4 pillars

Vision to end paediatric AIDS by 2030 focuses on addressing key gaps:

1. Missed opportunities for testing and late testing = **PILLAR 1**
2. Ineffective linkage and lack of support on re-engagement in care where needed; transmission = **PILLAR 1**
3. Optimizing testing frequency and offer of prevention = **PILLAR 1 AND PILLAR 2**
4. Prioritizing a range of approaches and strategic mix through core services including PMTCT/ANC = **PILLAR 2 and PILLAR 3**
5. Lack of low barrier service delivery and restrictive policies (e.g., age of consent for testing) = **PILLAR 4**

Priority populations and Pillars of the Global Alliance



Early testing and optimized treatment & care for children and adolescents living with HIV and perinatally exposed children

Closing the treatment gap and optimizing continuity of treatment for pregnant and breastfeeding women living with HIV

Preventing new HIV infections among pregnant and breastfeeding women in ANC and PNC

Addressing structural barriers that hinder access to services

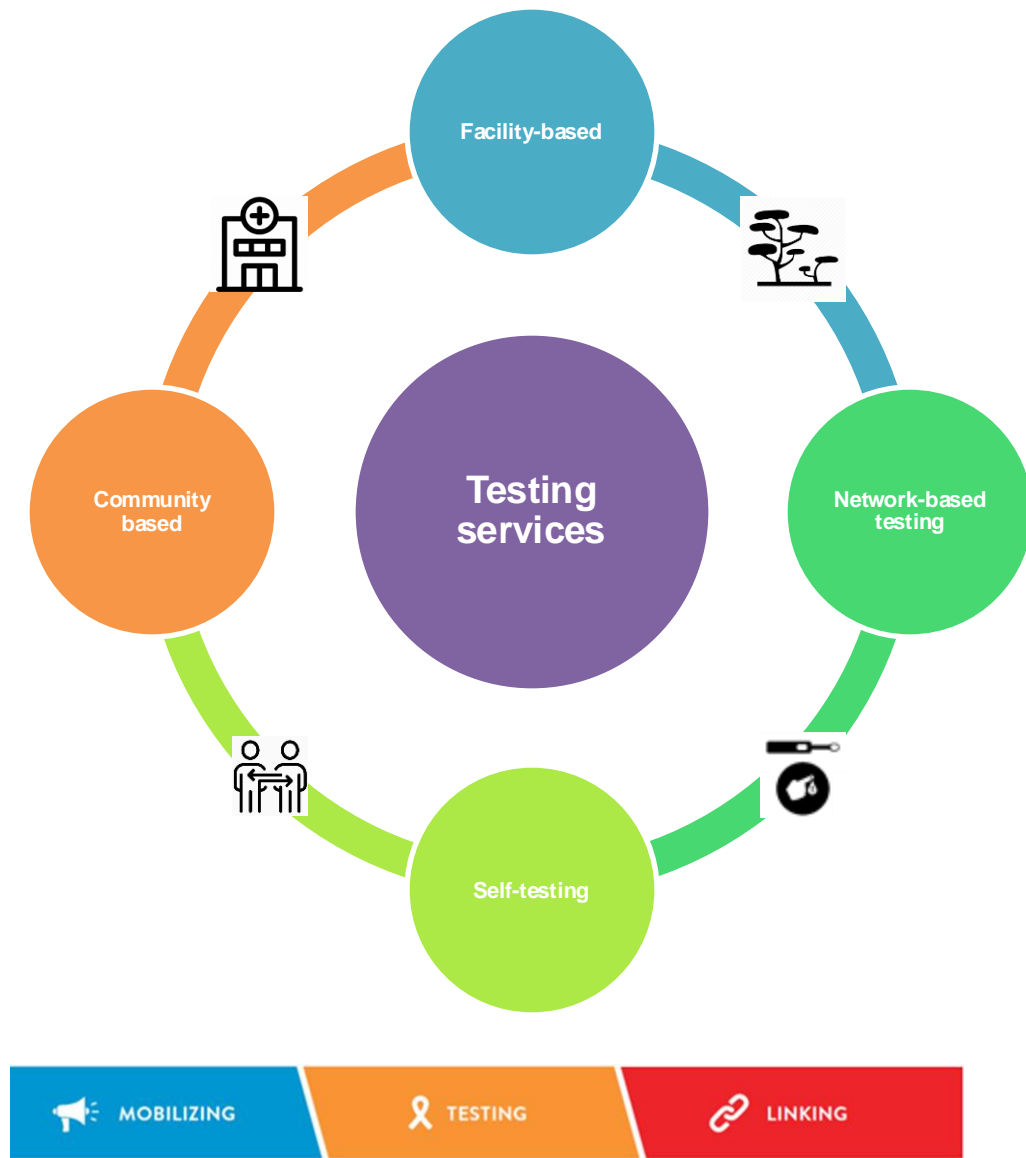
POPULATIONS

- I. Children and Adolescents Living with HIV
- II. Children perinatally exposed to HIV
- III. Pregnant and Breastfeeding Girls and Women Living with HIV
- IV. Pregnant and Breastfeeding Girls and Women who are HIV-negative but at risk of HIV

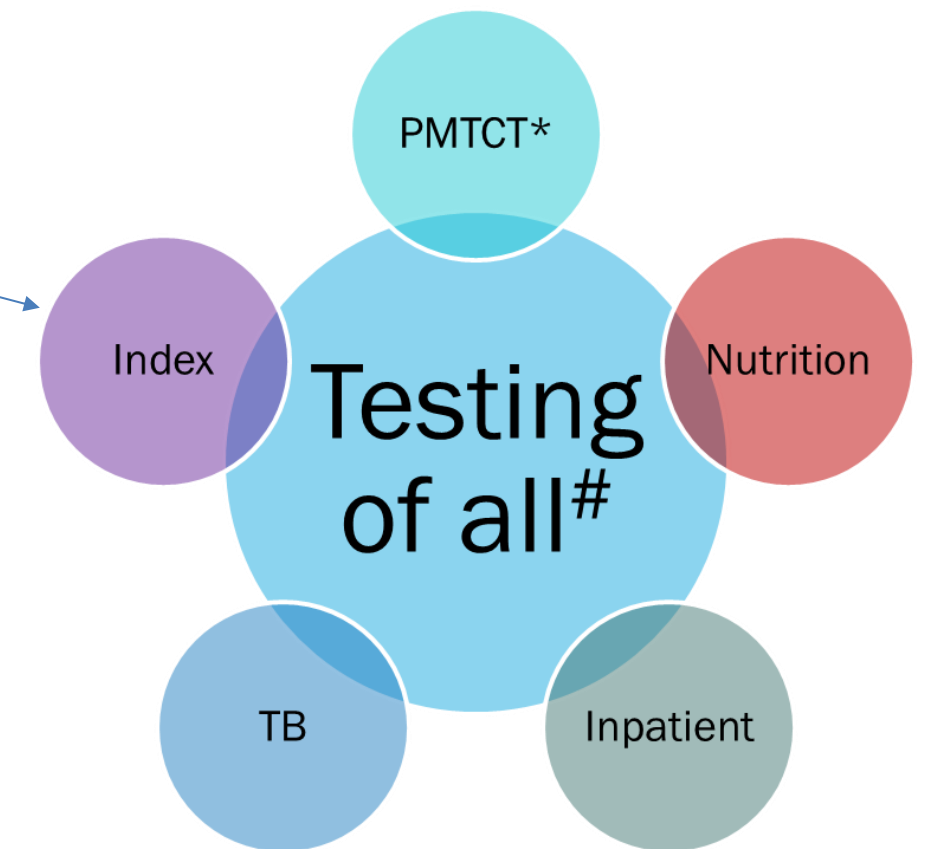
IT IS TIME TO END AIDS IN CHILDREN: NOW



Adopting a targeted, adaptable strategy approach to finding the missing children



Network-based testing services: Range of approaches (partner services, social network, family/household testing) that extend testing, as well as offer of prevention and treatment, by ~~supporting individuals~~ to disclose to, refer for testing, and/or distribute self-tests to partners, families, and other members of their social networks.



UPDATED WHO RECOMMENDATION: Network based testing services should be offered as additional approach to HIV testing as part of a comprehensive package of care and prevention (*strong recommendation, moderate certainty evidence*).

- **Provider-assisted referral** (i.e. index testing) (moderate certainty)
- **Social network testing services (low certainty)**
- **Family and household testing services** (good practice)

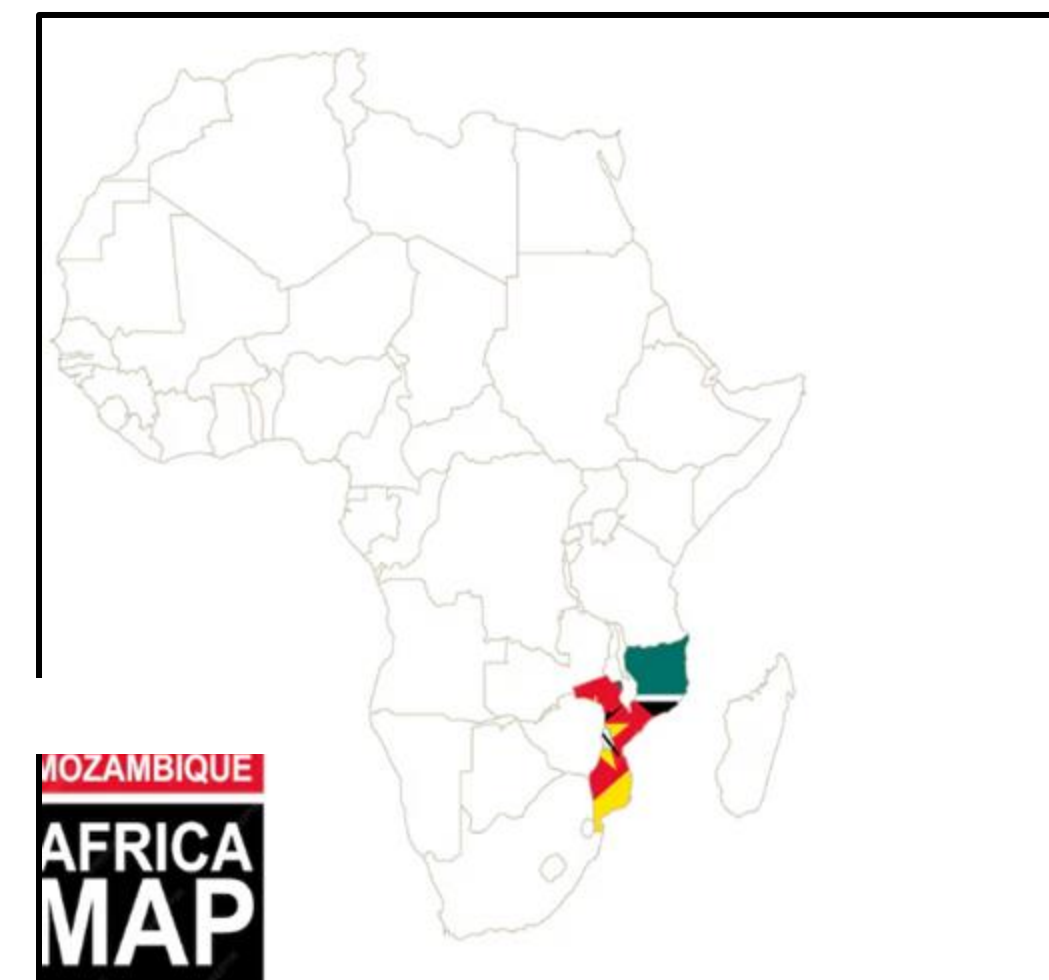
• Different purposes for testing

- **Case-finding focused testing:** Implementation focused on reaching undiagnosed individuals and facilitating linkage to care. Generally, includes specific targeted testing outreach.
- **Prevention focused testing:** Ensuring those people stay negative and identifying HIV early in those with high ongoing risk. Core services e.g. PMTCT/ANC, KP, AGYW, VMMC, PrEP/PEP
- Aim is to achieve a strategic mix that is person-centered

HIV Estimates In Mozambique

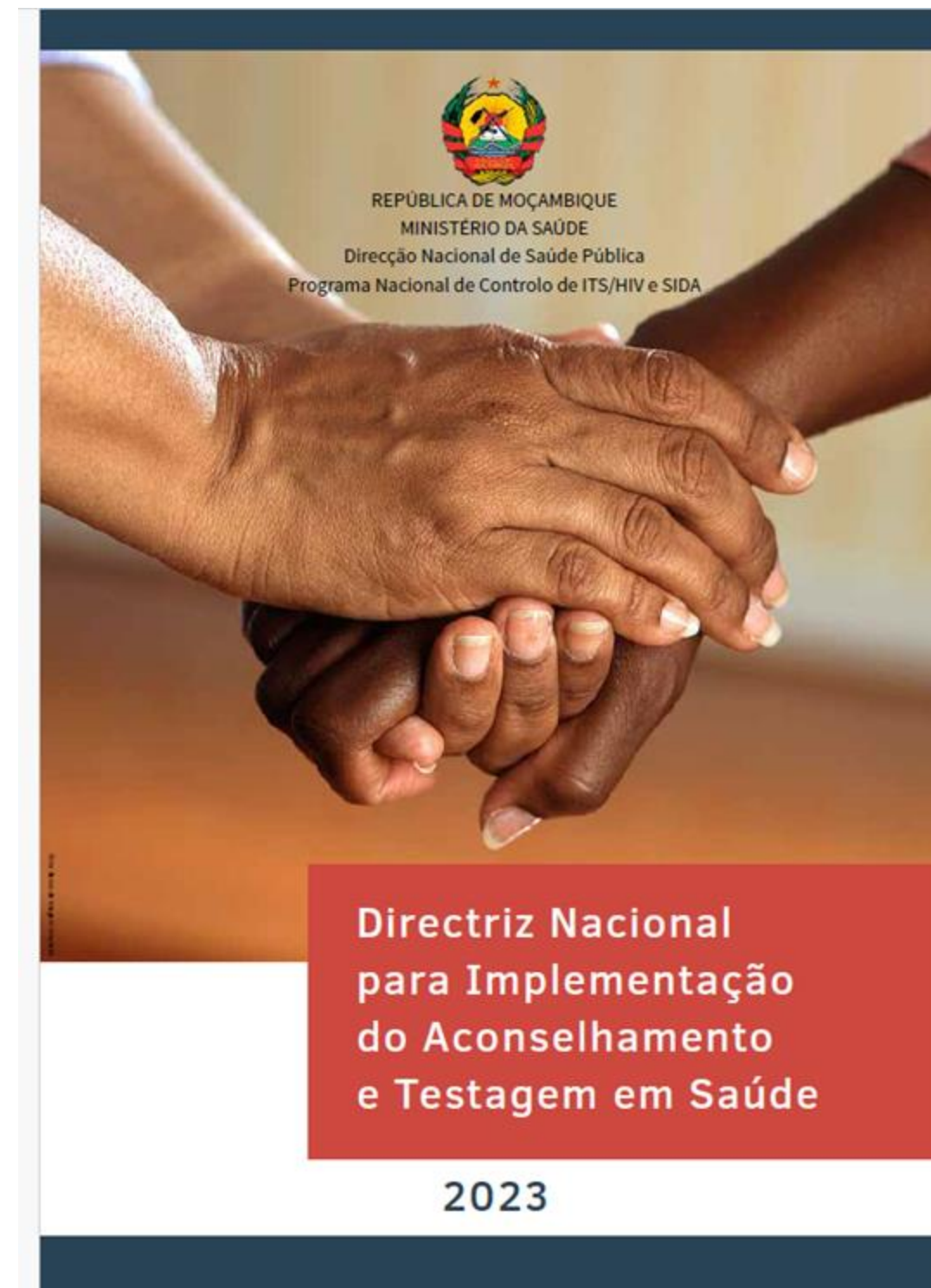
Mozambique, 2023	Total 2023	Percentage of National Estimate
Nr PVLHIV	2 440 000	
N° Adults 15+ LHIV	2 290 000	94%
Nr CLHIV	150 000	6%
Nr AY 15-24 LHIV	230 000	9%
Nr Pregnant women HIV+	125 298	5%
Nr New HIV Infections	81 000	
Nr of new infections per day	222	0,3%
Nr of new infections in adults	69 000	85%
Nr of new infections AY 15-24	27 000	33%
Nr of new infections per day AY	74	0.1%
Nr of new infections in Children	12 000	15%
Vertical Transmission rate	10%	
Nr of HIV-related deaths per year	44 000	2%

Source: 2023 Estimativas, Spectrum V6.36



Differentiated HTS Modalities and Strategies

Targeting Testing Approaches



Health Facility Based Testing Approach

1. Provider Initiated Testing and Counselling (PITC) : Routine and Based on signs and symptoms



- a. Routine PITC offered regardless of HIV risk factors. Inpatients wards, TB services, before surgical procedures, at child risk consultation and emergency services.
- b. Testing based on signs and symptoms, use HIV RST offered at:
 - Immunization clinic (Mother retesting and child testing)Sick Child Consultation, YFS

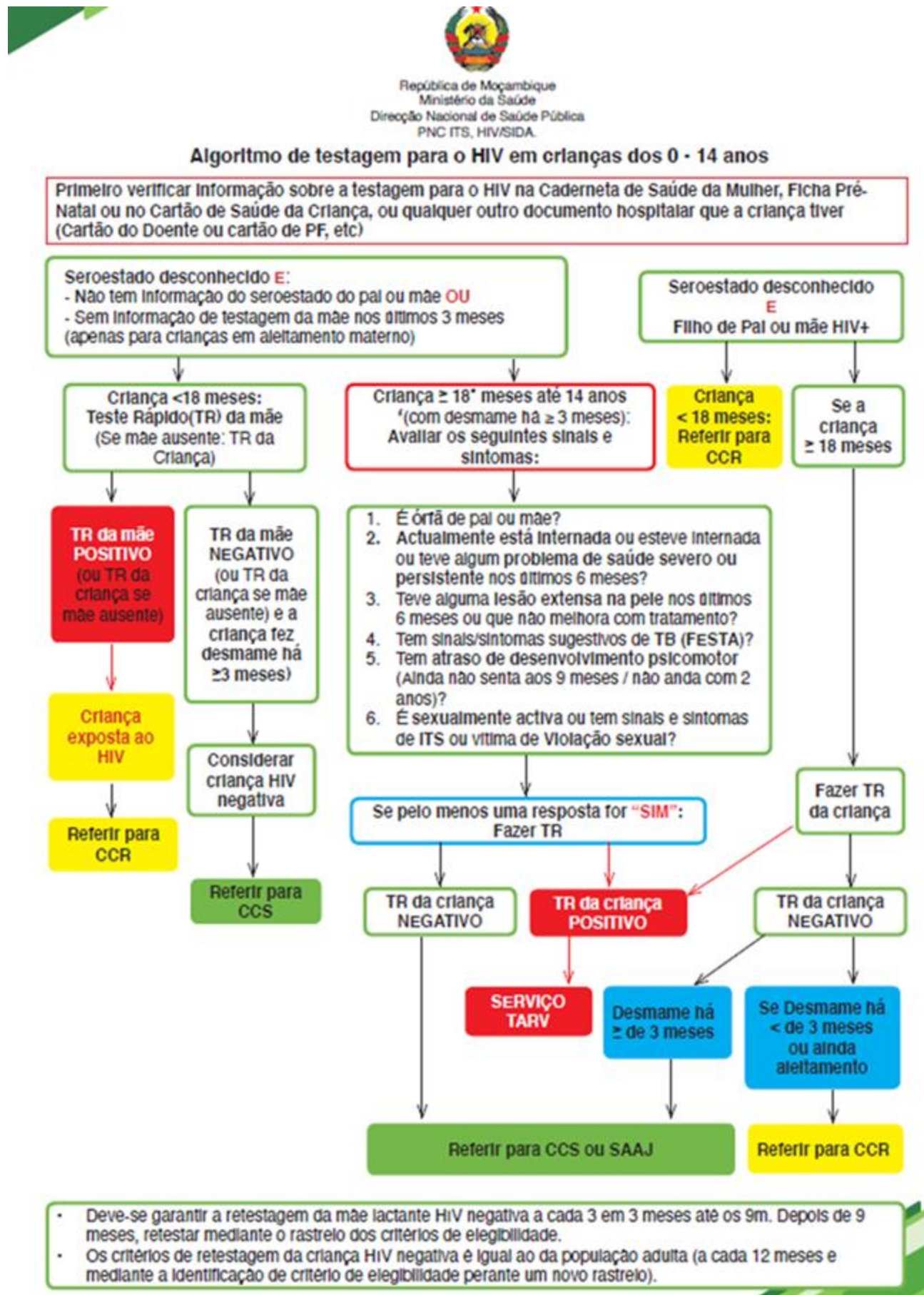
2. Voluntary Testing and Counselling



- a. Voluntary
- b. Client walk in counselling and testing services.

Index Case Testing

Provider Initiated Testing and Counselling – HIV RST



- HIV RST in use at all paediatric entry points
- Testing based on signs and symptoms
- It is under revision, for simplification

Community Based Testing Approach

Mobile Testing



It takes place in different locations and on pre-defined dates by local health authorities, partners, community leaders, district officials, etc through Mobile brigades and Clinical mobiles

Home Visits



Home visits to offer HIV Testing and Counselling (HTC)

Fixed CTC



It takes place in a permanent location: universities, technical schools, churches, community centres, formal and informal workplaces, and truck stops.

Index Case Testing & HIV Self-Testing (Target AY 15+)

Index Case Testing (ICT)

- Testing of contacts of all PLHIV on ART



Who is eligible for ICT in Paediatric Context?

- Biological children < 15 yrs of HIV-positive parents
- Parents of HIV+ children/adolescents < 15 years of age



Where is ICT offered?

- Community or Health facility
- Index case testing is voluntary, opt-out testing
- The client is free to choose where to be tested

Index Case Testing and Family Screening Tool



REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DA SAÚDE

Formulário de Rastreio Familiar

Origem do CI: _____ NID: _____; Data: ____/____/____

Mãe, Idade: _____ CI		Pai, Idade: _____ CI	
0	1	2	
3	4	5	
E	NID: _____		

1º Filho, Idade: _____ CI		2º Filho, Idade: _____ CI		3º Filho, Idade: _____ CI		4º Filho, Idade: _____ CI	
0	1	2		0	1	2	
3	4	5		3	4	5	
E	NID: _____			E	NID: _____		

5º Filho, Idade: _____ CI		6º Filho, Idade: _____ CI		7º Filho, Idade: _____ CI			
0	1	2		0	1	2	
3	4	5		3	4	5	
E	NID: _____			E	NID: _____		

Legenda	
0	= Recusa
1	= HIV Negativo
2	= HIV Positivo
3	= Pre-TARV
4	= Em TARV
5	= Óbito

Paciente consente a Testagem dos Contactos Unidade Sanitária Comunidade Recusa

Paciente consente ser telefonado por pessoal de saúde Sim Não

Assinatura _____ Data Prevista da Testagem: ____/____/____ (se aplicável)

Endereço / Telefone² (só se o índice dá consentimento)

1. Lembrar que dar o consentimento é opcional e não obrigatório
2. Caso seja endereço, escreva o nome do Bairro, Quarteirão, Rua/Av., N° da Casa. Para zonas Rurais identifique alguma referência que possa facilitar a localização da sua residência.

Family Screening Form (FRF)

Regardless of the setting (HTS,C&T), the ICT strategy begins with the screening of the contacts and filling-out the Family Screening Form (FRF).

The FRF:

Helps the health provider to identify sexual partners and eligible children for HIV testing.

Documents the Index Case's consent for testing of sexual contacts and the provider's follow-up calls for counseling and testing.

Who should be identified for ICT through the FRF?

Sexual partner of the index case (IC)

Child under 15 years old

Mother/Father of the index case (under 15 years old)



REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DA SAÚDE

Family Screening Form

IC origin _____

PIN _____;

Date ____/____/____

Mother, age

CI

0 1 2
3 4 5

E

NID _____

Father, age

CI

0 1 2
3 4 5

E

NID _____

1st Child, age

CI

0 1 2
3 4 5

E

NID _____

2nd Child, age

CI

0 1 2
3 4 5

E

NID _____

3^o Filho, Idade: _____

CI

0 1 2
3 4 5

E

NID _____

4^o Filho, Idade: _____

CI

0 1 2
3 4 5

E

NID _____

Legenda

0 = Recusa
1 = HIV Negativo
2 = HIV Positivo
3 = Pre-TARV
4 = Em TARV
5 = Óbito

Family screening form

0- Refuse
1 - HIV Negative
2- HIV Positive
3- Pre ART
4- on ART
5- Died

Patient consents Testing

Unidade Sanitária *Comunidade* *Recusa*

Patient consents to receive phonecalls

Sim *Não*

Signature

scheduled date for testing

____/____/____ *(se aplicável)*

Address and Phone *(só se o índice dá consentimento)*

1. Lembrar que dar o consentimento é opcional e não obrigatório
2. Caso seja endereço, escreva o nome do Bairro, Quarteirão, Rua/Av., Nº da Casa. Para zonas Rurais identifique alguma referência que possa facilitar a localização da sua residência.

Index Case Register Tools : Master Card

REPÚBLICA DE MOÇAMBIQUE
MINISTÉRIO DA SAÚDE
SERVIÇO NACIONAL DE SAÚDE

Ficha Resumo

Data Abertura da Ficha: / / NID (Código da US / Anual / Individual): / / /
LIVROCS: Pré-TARV: Pág. Linha: TARV: Pág. Linha:

Provincia: Distrito: Unidade Sanitária:
Nome completo: Nº de B.I.:
Sexo: Data de nascimento: / / Idade: Tel. Cel (1):
Profissão: Nível de Escolaridade: Tel. Cel (2):
MORADA - Distrito/Cidade: Localidade/Bairro: Ocuja/Quarteirão:
Avenida / Rua / Casa: Pano de

CONFIDENTE - Tel. Cel (1):
Nome e Parentesco: Tel. Cel (1):
MORADA - Distrito / Cidade: Localidade / Bairro: Ocuja/Quarteirão:
Avenida / Rua / Casa: Pano de

Situação da família					
Nome	Idade	Teste HIV (P/N/D)	Cuidados HIV (S/N)	Em CCR (S/N/A)	NID
Parentesco					
		P N	S	S N	
		D N	A		
		P N	S	S N	
		D N	A		
		P N	S	S N	
		D N	A		

ARVs tomados anteriormente, antes do TARV actual SIM NÃO

Se SIM: Data Onde? ARVs

PTV PPE / / /
 Outros, especifique: / / /

No início do TARV - TARV - Coorte (Mês / Ano) / /
Data Regime ARV inicial de 1ª linha
Unidade Sanitária

No início TARV Gravidez: Sim Não Não sabe Sim Não
Estado de OMS CD4 (Nº / %)

Alternativas à 1ª linha

Data	Regime	Motivo
/ /	Novo Regime	Motivo
/ /	Novo Regime	Motivo
/ /	Novo Regime	Motivo

Mudança para a 2ª linha (ou substituição dentro da 2ª linha)

Data	Regime	Motivo
/ /	Novo Regime	Motivo
/ /	Novo Regime	Motivo

Mudança para a 3ª linha

Data	Regime	Motivo
/ /	Novo Regime	Motivo

Mudanças no Estado de Permanência TARV

Suspenções ou Abandonos

Suspensão	Abandono	Suspensão	Abandono
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Data: / /
Motivo: / / /

Ferido - Data: / / /
 Transferido para: / / / Unidade Sanitária: / / /
 Óbito: / / /

Cuidados de HIV

Data: / /
Teste HIV: TR PCR Unidade Sanitária: / / /
 Diagnóstico presumido em crianças < 18 meses

Início Pré-TARV - U. Sanitária: / / /
Geor: TB SAAJ CPNG GCRL Clínica

Transferido de outra US: / / / Unidade Sanitária: / / /
 Em Pré-TARV TARV

Alergias a medicamentos

Data	Condições médicas imponentes
/ / /	<input type="checkbox"/> Hepatite / <input type="checkbox"/> TB / <input type="checkbox"/> Criptococose / / /
/ / /	<input type="checkbox"/> Diabetes / <input type="checkbox"/> HTA / <input type="checkbox"/> S. Kaposi / / /
/ / /	<input type="checkbox"/> Outras (Especifique / Data): / / /

Último CD4 (Valor / Data): / / /
Última Carga viral (Valor / Data): / / /

Última Profilaxia Isoniazida (Data de início): / / /
Última Profilaxia Isoniazida (Data de fim): / / /

Situação da família

Nome	Idade	Teste HIV (P/N/D)	Cuidados HIV (S/N)	Em CCR (S/N/A)	NID
Parentesco					
		P N	S	S N	
		D N	A		
		P N	S	S N	
		D N	A		
		P N	S	S N	
		D N	A		

- Family HIV Status**
- Name
 - Age
 - HIV status
 - Patient identification number

Ficha APSS e PP

1 NID: / / / Nome: / / / Livro APSS e PP: Pág. Linha: / / /
Sexo: M F

2 População Chave: HGH PID REC MTS Outro: / / /
População Vulnerável (Especifique): / / /

3 Condições (Data): / / / Actual: / / / Próxima: / / /

4 ESTADO DA REVELAÇÃO DO DIAGNÓSTICO à Criança / Adolescente? Não / Parcial / Total (N/P/T)

N	P	T	N	P	T	N	P	T	N	P	T	N	P	T	N	P	T	N	P	T

5 ACONSELHAMENTO PRÉ-TARV Educação básica sobre HIV (Prevenção, Transmissão, Progressão da doença e Adesão (Preparação, Necessidade de adesão, Plano de Tratamento) (S/N)

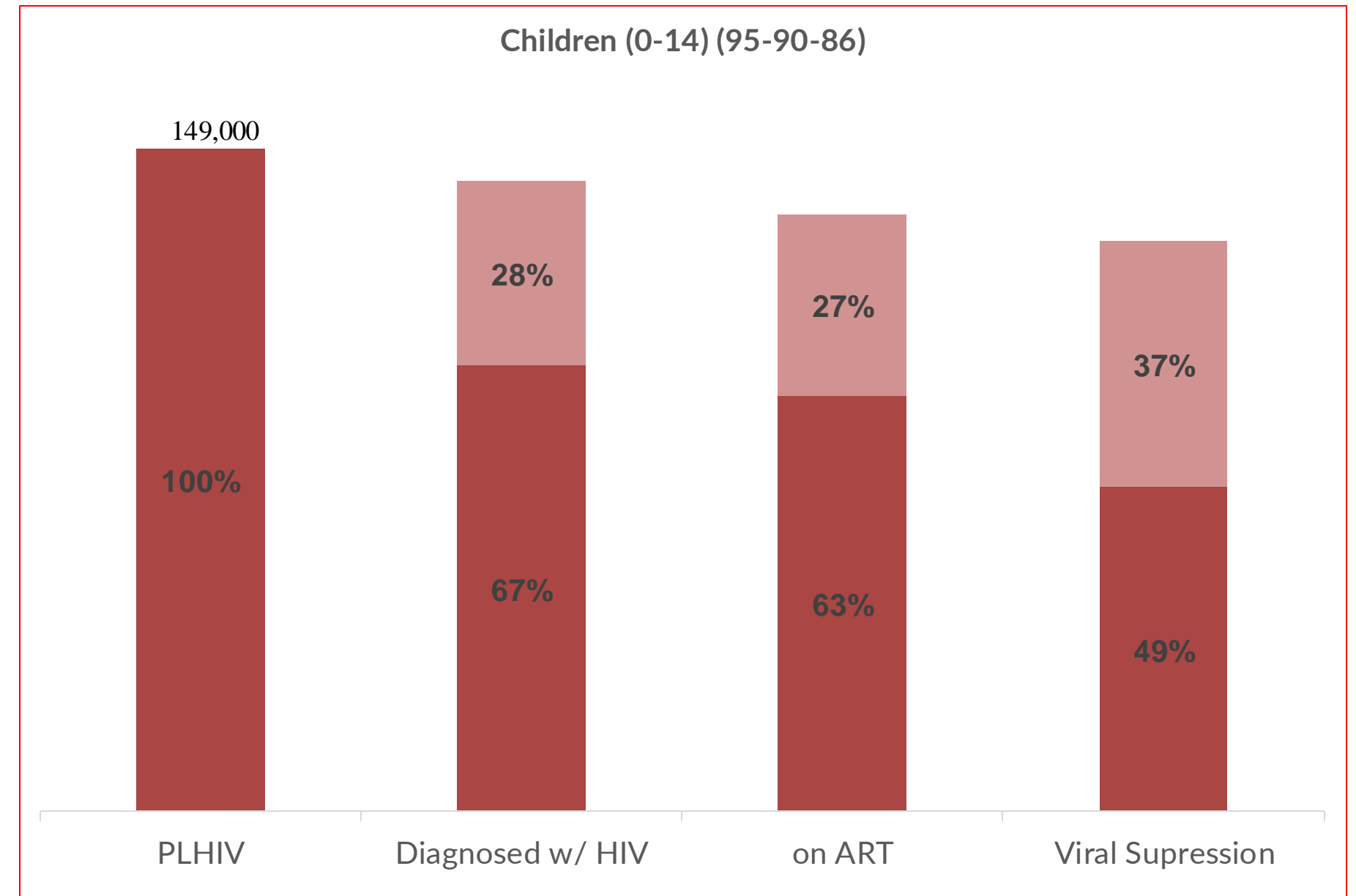
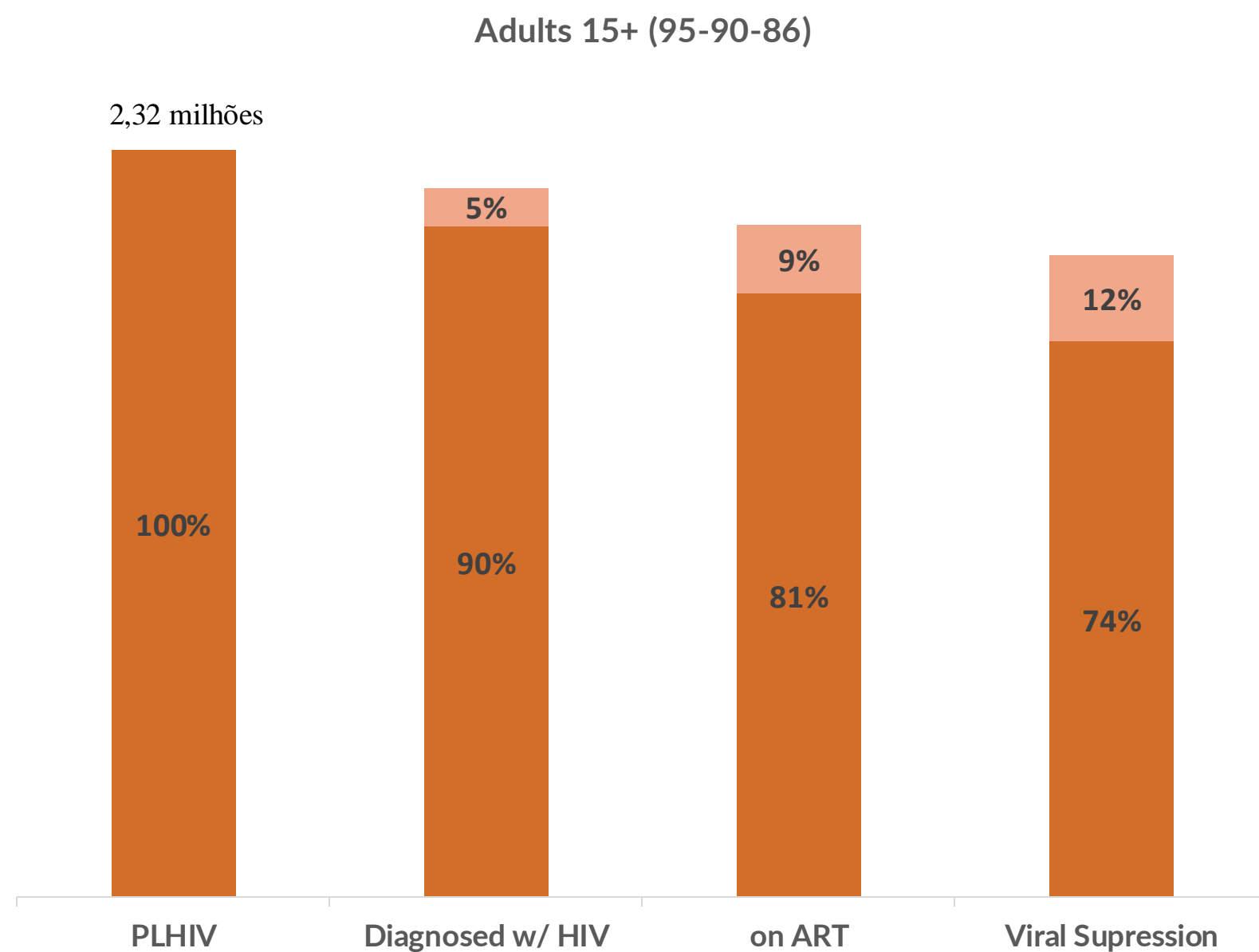
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6 FACTORES PISCO

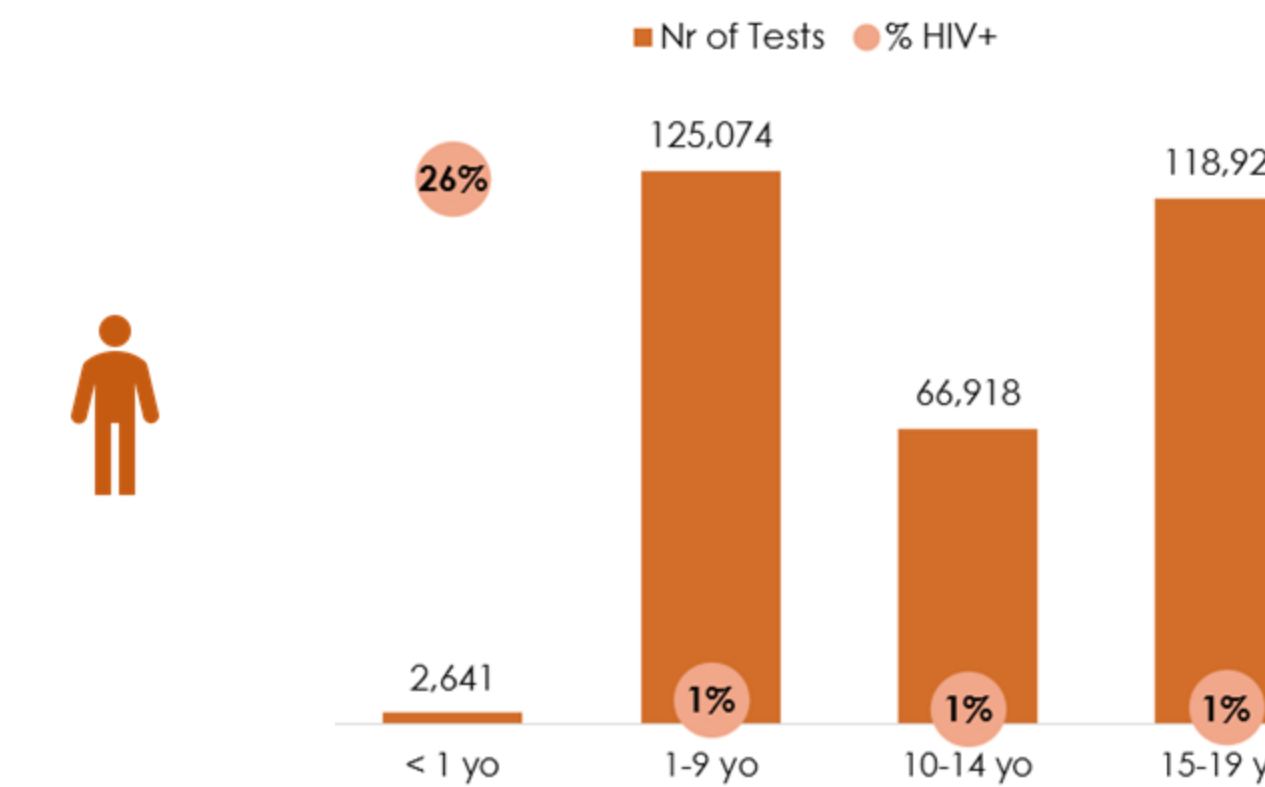
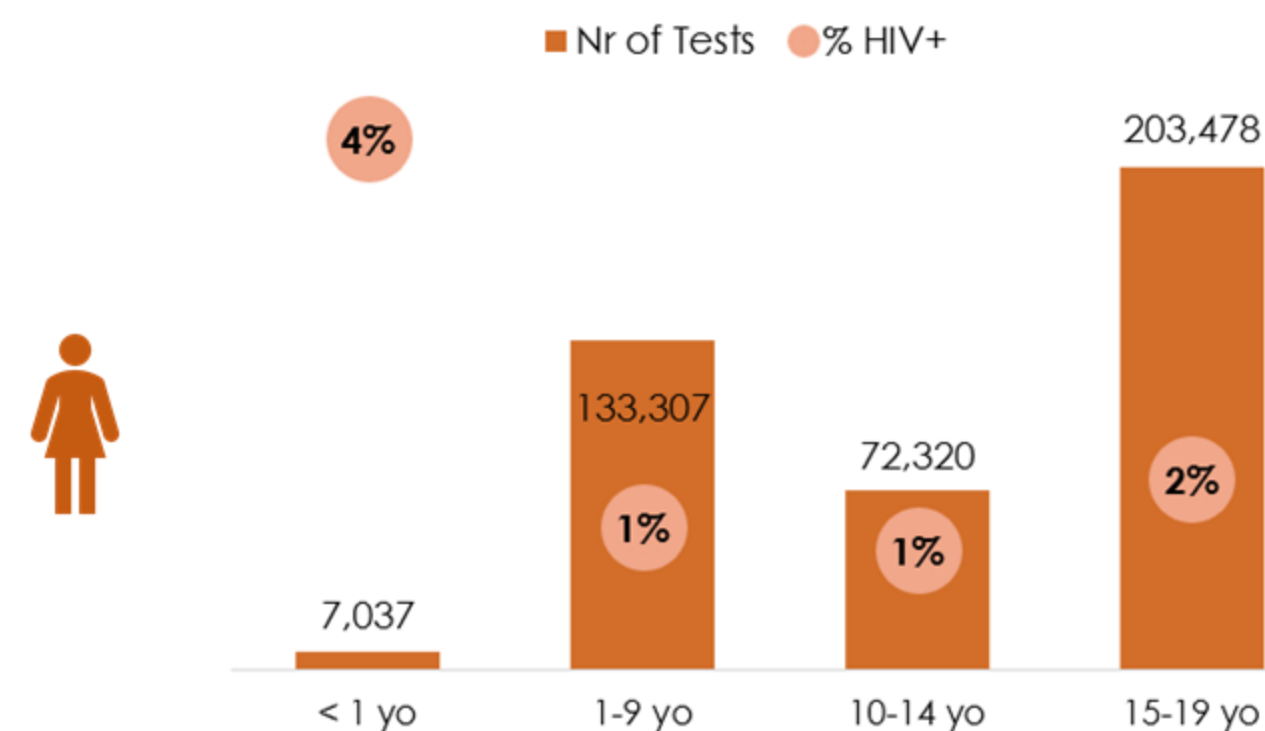
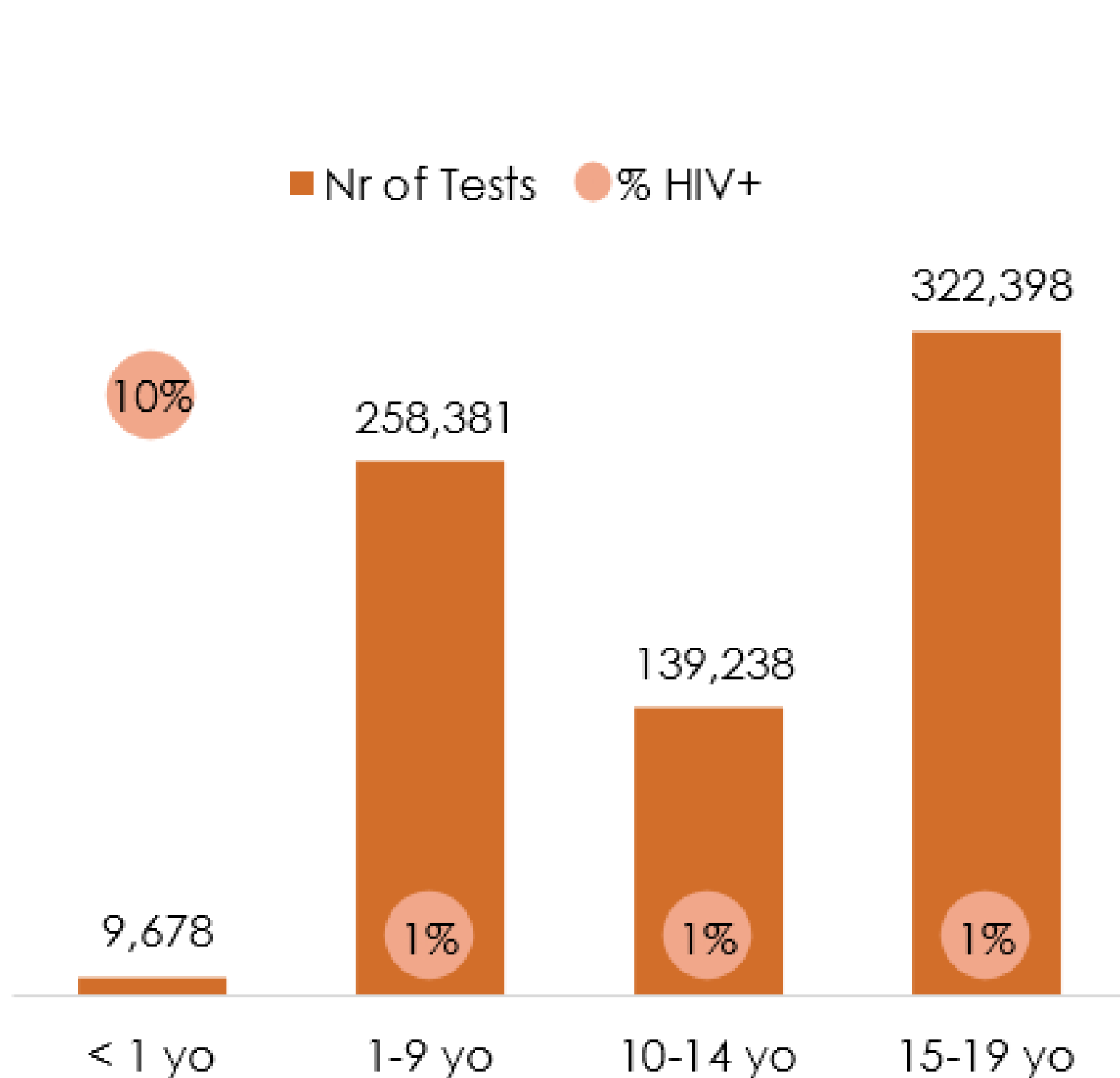
A	B	C	L	A	B	C	L	A	B	C	L	A	B	C	L	A	B	C	L	A	B	C	L

Paediatric Testing Results (1st Semester 2024)

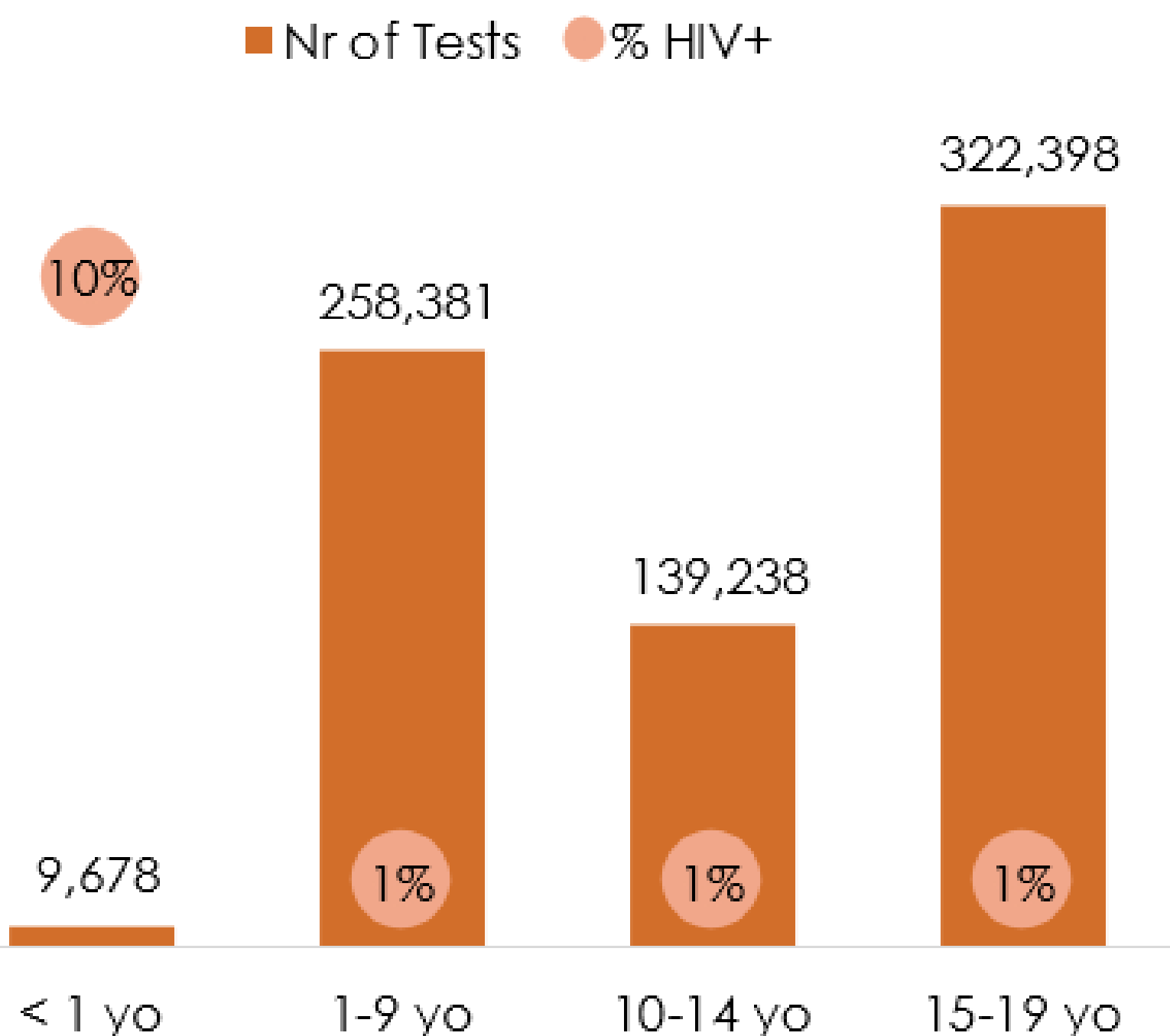
95 95 95 Cascade as of 1st Semester 2024, Persistent Gaps Among Children



Testing and Positivity by Age 0-19yo - 1st Semester 2024



Testing and Positivity by Modality - 1st Semester 2024






Tested

Age group	VCT	Community	PICT	Total
< 1 Ano	747	2,854	6,077	9,678
1 - 9 Anos	15,500	129,315	113,566	258,381
10 - 14 Anos	11,347	63,780	64,111	139,238
15 - 19 Anos	54,160	39,588	228,650	322,398
Total	81,754	235,537	412,404	729,695




% HIV+

Age group	VCT	Community	PICT	Total
< 1 Ano	19%	8%	10%	10%
1 - 9 Anos	3%	1%	2%	1%
10 - 14 Anos	2%	1%	1%	1%
15 - 19 Anos	1%	2%	1%	1%
Total	2%	1%	1%	1%

High Positivity Among Sexual Partners and Parents ICT- 1st Sem. 2024

Index Case Testing	VCT	Community	PICT
 Sexual Partners	20%	16%	20%
 Biological children <15 yo	3%	1%	3%
 Parents (IC <15 yo)	27%	15%	19%
National	14%	8%	12%

HIV Positivity by Contacts of Index Case by Province - 1st Sem. 2024

Province	Sexual Partners 		Biological children <15 yo 		Parents (Index Case) 		Total	% HIV+
	Nr of Tests	% HIV+	Nr of Tests	% HIV+	Nr of Tests	% HIV +		
Niassa	9,422	14%	6,323	2%	67	36%	15,812	9%
Cabo Delgado	5,936	26%	8,772	1%	502	4%	15,210	11%
Nampula	12,304	18%	19,685	3%	570	24%	32,559	9%
Zambézia	43,355	12%	52,343	1%	1,561	19%	97,259	6%
Tete	22,785	17%	7,963	2%	87	22%	30,835	13%
Manica	9,491	38%	14,562	1%	518	15%	24,571	16%
Sofala	11,843	30%	22,899	1%	249	31%	34,991	11%
Inhambane	7,969	8%	6,855	3%	242	24%	15,066	6%
Gaza	12,047	12%	11,576	1%	97	11%	23,720	7%
Maputo Província	8,551	11%	17,565	1%	58	28%	26,174	4%
Maputo Cidade	9,593	21%	14,389	1%	63	32%	24,045	9%
National	153,296	17%	182,932	1%	4,014	19%	340,242	9%

Challenges For Paediatric HIV Testing

1.



False home address

Challenges tracing the contacts due to false cell phone number or false address;

2.



GBV/IPV

Fear of GBV and/or risk of IPV

3.



HIV Disclosure

Fear of Disclosure to Partners: fear the stigma associated with disclosing their status to their partners;

4.



Resource Limitations

Lack of financial resources, logistical support, and infrastructure hinder effective implementation of testing strategies

Global Alliance Pillar multi country discussions on finding the missing children

Key Concerns Raised:

- Late identification of children
- Limited resources and staffing at primary healthcare facilities.
- Lack of engagement from the private sector in child HIV screening.
- Knowledge gaps among healthcare workers in private facilities.
- Community outreach challenges in providing services to children.

Opportunities:

- Implementing service delivery systems guide for child identification and HIV testing.
- Collaboration with private facilities.
- Strengthening primary healthcare facilities with resources and staffing.
- Utilizing data-driven decision-making for better child health services.
- Integrated Child Health days for comprehensive health services.
- Innovative ways of building and sustaining capacity for healthcare workers
- Implementation science and research to address and improve case finding

Key questions to be answered on finding the missing children – Global Alliance Pillar 1 discussions

Where are the missing children. Do we know? A case for sub national analysis using precise data.

We have the tools needed. Do we? Why are we not moving as quickly as we should and what are the key issues that need to be addressed?

It is not all about funding, is it? What contextual challenges hindering movement and progress?

We need to focus on the right things, do things differently, are we? What should we be doing better, more or less of?

We need the right people engaged, are they? Are there stakeholders that are not fully given their place on the table



Way Forward



- Mop- Up Campaign – Master card review of all PLHIV on ART to identify contacts



- Finalize revision of the Risk Screening Tool



- Focalized Testing - Pilot in 5 Districts in Nampula
- No HIV RST at Immunization and Triage
 - HIVST at HF in Non PEPFAR supported sites

Index Case Testing – Mop up Campaign

Intensified Case Finding for All <15yo Biological Children of PLHIV on ART in PEPFAR supported sites

Background:

- As of Q1 FY23, 41% of identified CLHIV aged 1-15 were tested through index case testing (ICT) in PEPFAR sites
- An estimated 43K children are unaware of their HIV status, highlighting an important gap on case finding.

Rationale (MoH Guidance):

- All biological children of PLHIV on ART should be tested for HIV with documentation in parent clinical records (Mastercard, HTS Books and FST).
- Paediatric ICT is implemented as a voluntary strategy, countrywide, and intensive review of all existing ART client charts **has not been conducted**

Objective of the intervention:

- To ensure that all <15-year-old biological children of people living with HIV on ART(PLHIV) have the opportunity to be tested,

Index Case Testing – Mop up Campaign

The intervention:

- Intensive review of Mastercard's of all PLHIV on ART
- Short-term personnel will be hired for intensified HIV screening, supervision, patient follow-up via calls and visits, and community-based HIV testing services (HTS).
- Patients without evidence of ICT testing for their biological children, and with a signed consent form, will be contacted by community workers via phone calls, SMS, or home visits to offer HIV testing for their children, either at a facility or in the community, depending on client preference.
- Effective linkage to ART and enhanced psychosocial support to parents to provide a supportive environment for sustained ART adherence will be ensured.

This opportunity will be used to review other missing information, such as viral load, TB screening and TB preventive treatment for adults and newly identified CLHIV. Expected measurable outcomes include an increased number of children/adolescents 0-15 years old who know their HIV status and are linked to treatment.

Thank you
