PARIS

FAST-TRACK CITIES 2024

13-15 October 2024 | Maison de la Mutualité, Paris

Optimizing HIV Care Delivery Through a Collaborative, Data-driven Approach with Continuous Quality Improvement at Somdech Phra Nang Chao Sirikit Hospital, Chonburi, Thailand

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VILLE DE PARIS

IAPAC INTERNATIONAL ASSOCIATION OF PROVIDERS OF AIDS CARE

FAST-TRACK CITIES INSTITUTE

Stop TB Partnership

COALITION FOR GLOBAL HEPATITIS ELIMINATION

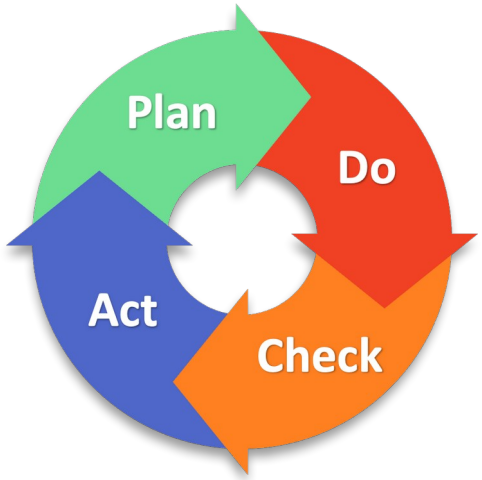
A program of THE TASK FORCE FOR GLOBAL HEALTH

Overview and HIV Care Challenges

- Somdech Phra Nang Chao Sirikit Hospital - A large tertiary care hospital serving military personnel and civilians
- Key HIV care challenges:
  - Low rates of linkage to care among newly diagnosed patients
  - Inconsistent HIV testing and counseling practices
  - Lack of coordinated care and follow-up systems
  - Suboptimal viral suppression rates
  - Limited staff training on HIV care best practices
- Adopted HIV Disease-specific certification (HIV-DSC) model to drive improvement in April 2023
  - Comprehensive quality improvement framework
  - Focuses on standardization, staff engagement, and patient-centered care

Intervention: Driving Improvement Through Collaboration and Data

- Implemented Continuous Quality Improvement (CQI) approach
  - Used Plan-Do-Check-Act (PDCA) cycle
- Emphasized staff engagement at all levels
- Leveraged data for decision-making and monitoring progress
- Key components:
  - Regular team meetings and feedback sessions
  - Data analysis workshops
  - Staff training on CQI methodologies
  - Development of data report/case list



Challenges in HIV Care, 2022

Linkage to Care

(35/347)

- Lack of lab alert system
- No linkage to care system
- Unable to provide same-day HIV result service

2,858 PLWH with 2,532 on ART

- No SDART protocol
- Lack of coordination across department and ARV clinic

PLWH 2,532

VL testing 2,230

- Inconvenient and limited hours for viral load testing

PLWH 2,532

VL <50 2,152

- Inadequate tracking of unsuppressed patients

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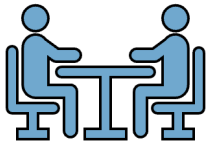
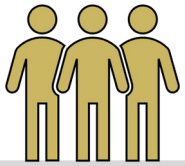
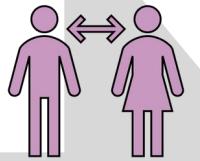
95[1]: Used Data to Design System







Combine testing Syphilis testing + HIV / AFB + HIV

Guideline STI

One Nurse as a VCT call center

Advanced HIV counseling Training for **VCT co-nurse**

Stay negative Clinic

Pilot VCT in Military

VCT in partners of pregnant women

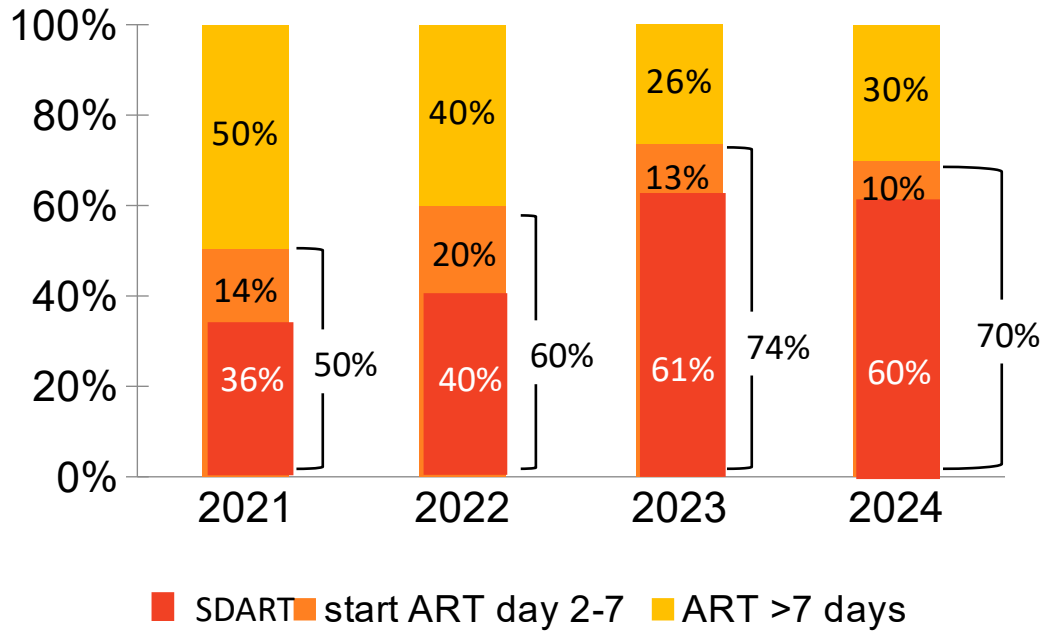
LOVEisU VCT in STI's partners

Data monitoring system by IT
Contact individuals at risk who miss HIV testing to get tested
Provide VCT service
PrEP/OPEP

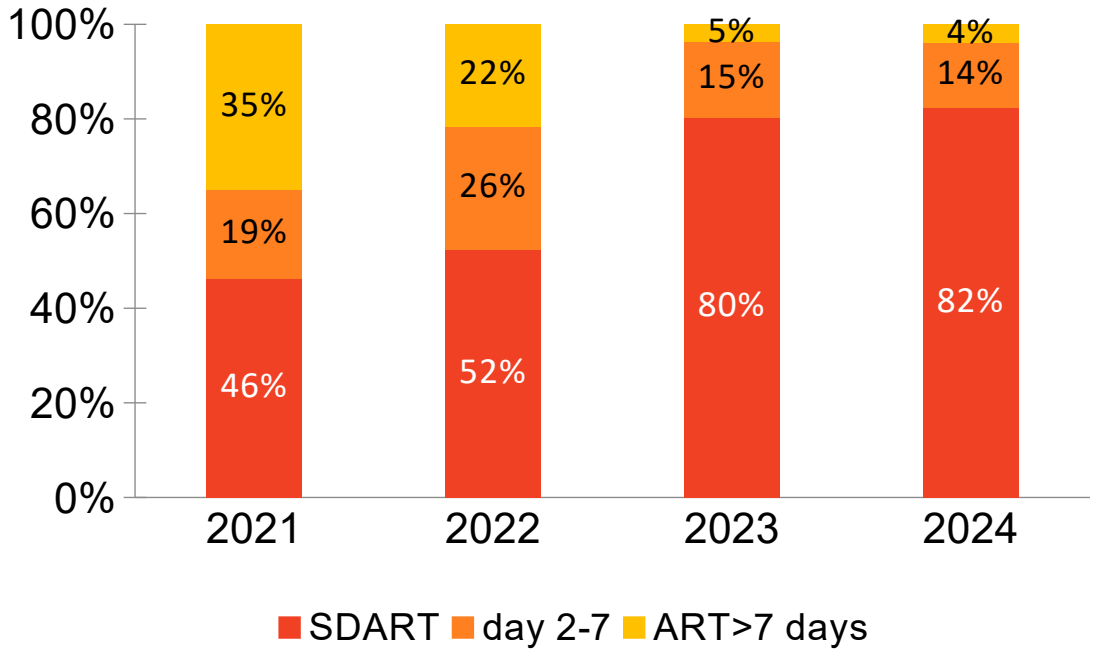
STI patients is schedule to Stay Negatived Clinic at 5 weeks after diagnosed STI

95²: ART Initiation

ART Initiation in All New PLWH



ART Initiation in New PLWH without OI



2021

- SDART in selected patients
- Only doctor start ART

2022

- SDART protocol
- ARV nurses prescribed SDART in some patients

2023

- SDART checklist
- Scale-up SDART
- ARV counseling by a pharmacist

2024

- Follow-up by volunteers within 7 days

95³: Scale-up VL Testing

VL Testing Coverage 2022

88%

VL testing before the last 3 months of the year with lab checklist

Extended-hour Testing Service

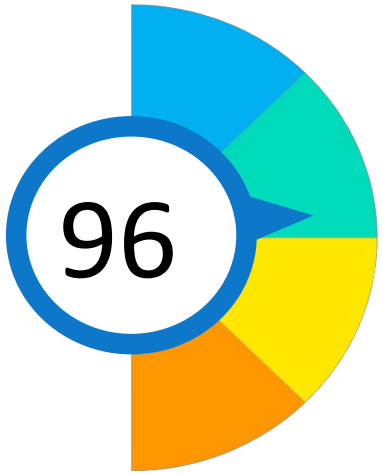
Lab alert if VL >1,000 c/mL

VL Testing Coverage 2023

99%

HIV Treatment Cascade in 2023

Linkage to Care



New 172
Entry to care 164

On ART

PLWH 2,896
On ART 2,876

VL Testing Coverage

PLWH* 2,741
VL testing 2,715

Viral Suppression

PLWH* 2,741
VL <50 2,655

*PLWH on ART >12 months

Data updated on 31 July 2024

HIV Treatment Cascade in 2024

Linkage to Care

New 73
Entry to care 72

On ART

PLWH 2,832
On ART 2,813

VL Testing Coverage

PLWH* 2,767
VL testing 2,730

Viral Suppression

PLWH* 2,767
VL <50 (on ART) 2,643

*PLWH on ART >12 months

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Impact of Our Initiatives and Key Takeaways

- Key Lessons:
  - Frequent, meaningful staff engagement is crucial
  - Clear protocols and training empower staff
  - Data analysis guides targeted interventions
  - Continuous monitoring enables rapid refinement
- Key elements of our approach:
  - Continuous Quality Improvement (CQI)
  - Active staff engagement
  - Data-driven decision-making
- Adaptable framework for other healthcare settings
- **Next steps:** Sustaining improvements and sharing knowledge

Acknowledgement

RAdm. Kittinan Ngamsil, RTN
RAdm. Danai Pandaeng, RTN
RAdm. Pattanachai Chalermwan, RTN
Hospital Administrators
Quality Management Center
MSO/NSO/CLT
VCT co-nurse
All patients and healthcare providers of
Somdech Phra Nangchao Sirikit Hospital

BACKUP SLIDES

Objective

- To demonstrate how a **collaborative, data-driven approach** started in April 2023
  - Optimize HIV care delivery through systematic quality improvement
  - Enhance clinical outcomes for PLWHs
  - Accelerate progress toward achieving the global 95-95-95 targets

Objective

- To demonstrate the effectiveness of these strategies in moving towards the 95-95-95 targets and provide insights that can be applied in other healthcare settings
- To showcase how Somdech Phranangchao Sirikit hospital, Chonburi, Thailand, optimized HIV delivery care through
  - Collaborative, data-driven approach
  - Continuous quality improvement (CQI) methods, such PDCA cycle
  - Addressing key challenges in the HIV care cascade
  - Achieving significant improvement in HIV testing, treatment and viral suppression rate
- Implementation started in April 2023

HIV Care in Thailand, 2022

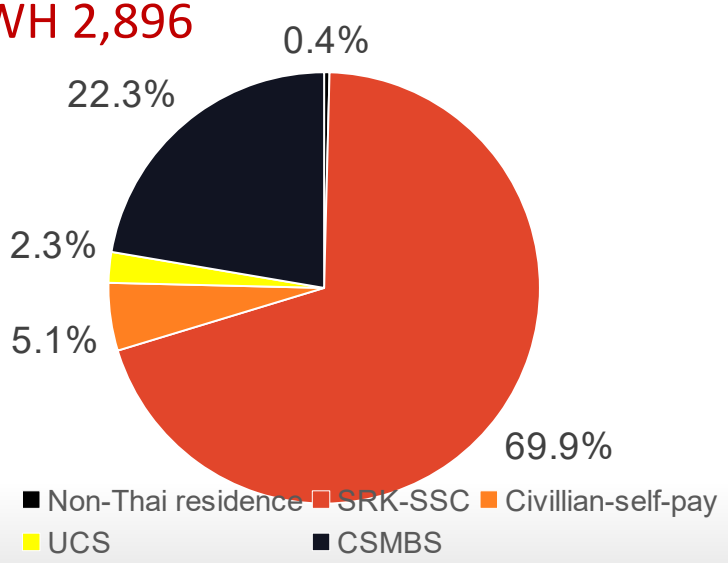
Alive	ART	VL suppressed	New	Death¶
561,578	457,133	445,194	9,230	5,152

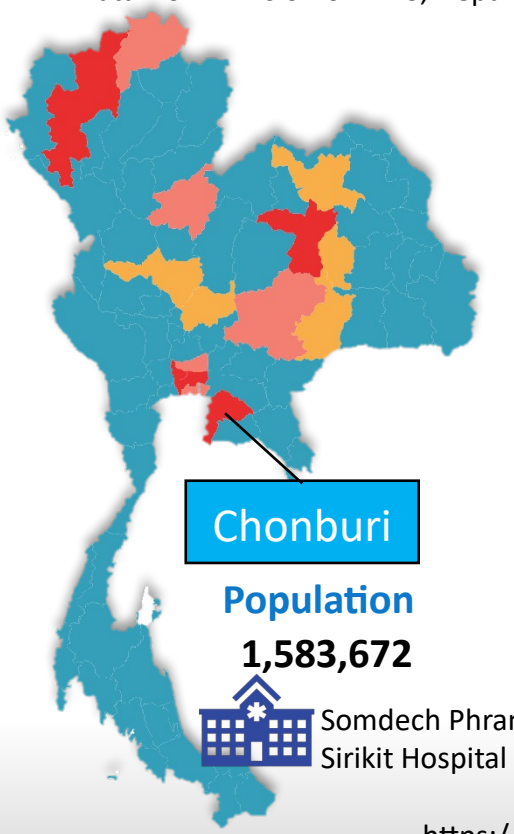
Data from Division of AIDS, Department of disease control of Thailand, 2022

¶ AIDs-related death

PLWH by Health Insurance Funds in Somdech Phranangchao Sirikit Hospital, 2023

PLWH 2,896





Population
1,583,672

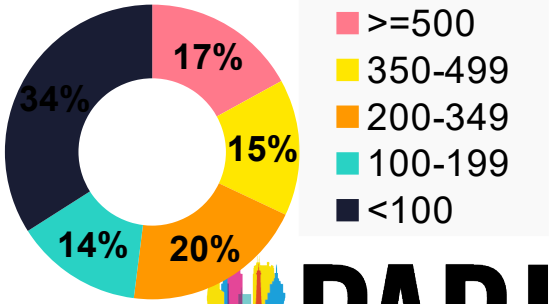
Somdech Phranangchao Sirikit Hospital

CHONBURI (Data in 2022)

Estimated PLWH	On ART	Suppressed VL
18,385	83%	85%

CD4

At ART initiation from 1,189 new PLWH (2022)



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https://hivhub.ddc.moph.go.th/dashboard/province.php

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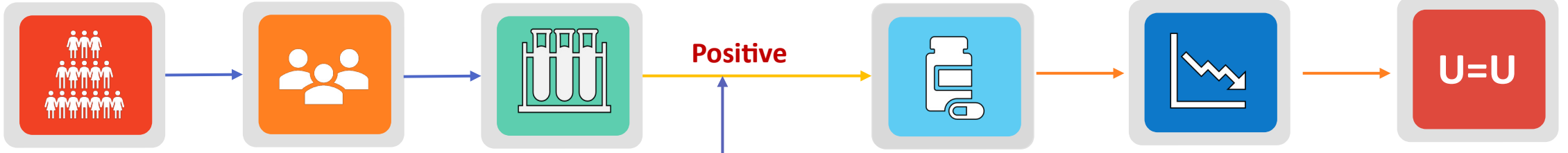
- Hospital provides only official hours for viral load testing, which was inconvenient

PLWH 2,532

VL <50 2,152

- Deficit in loss to follow-up system

RRTTPR



Reach & Recruit

Population at risk

1. **STI**
2. **TB**
3. **Pregnancy and partners**
4. **Partners of PLHIV**

VCT

1. Normalization
2. Decentralized VCT
3. VCT call center
4. **VCT co-nurse**
5. Advanced counseling training

Testing

1. Same-day test & result
2. Same-day CD4 result
3. HIV rapid test
4. Lab alert for HIV+
5. Extra-hour blood test
6. HIV VL testing
7. Urine LAM
8. App: SRK Touch
9. Combined HIV testing with AFB/syphilis

Negative (high risk)

Counseling to stay negative

Treating

1. **Linkage to care**
2. SDART/rapid ART
3. OI treatment
4. STI guideline
5. LTBI
6. ARV & TB clinic
7. ARV drug

nPEP, OPEP

PEP

PrEP

Retained

1. **Pre-emptive intervention to prevent loss**
2. **Follow-up system**

Suppressed VL

U=U

Stay Negative Clinic

(Prevention)

95-1 95-2 95-3

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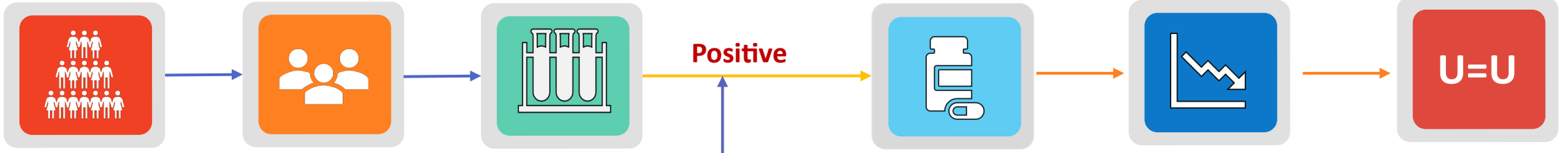
RRTTPR



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(Prevention)

95-1 95-2 95-3

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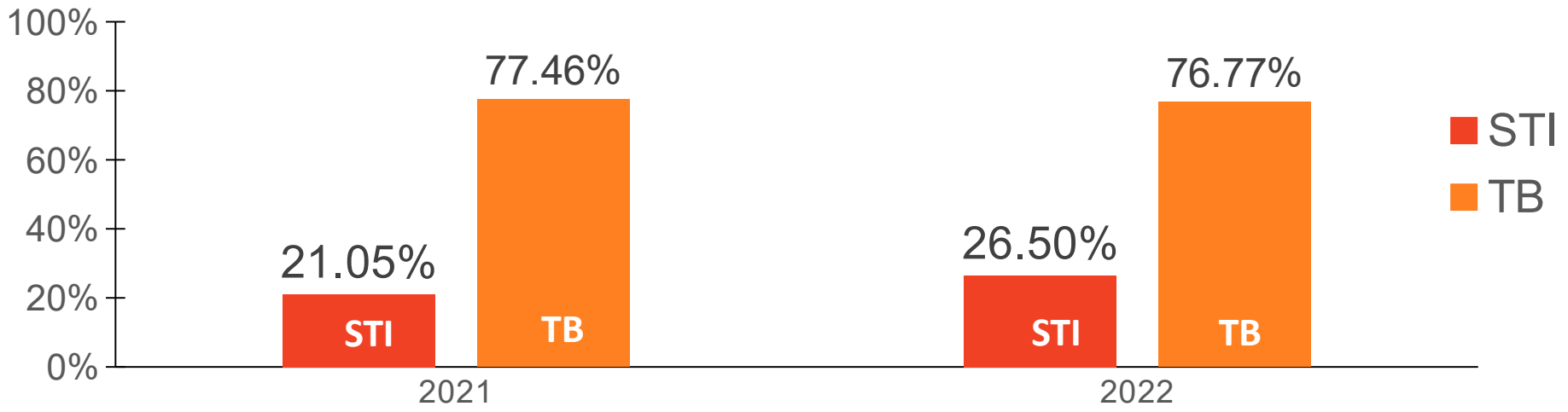
95-1

HIV Diagnosis and Linkage to Care in Hospital

Data at 31 December 2022

HIV Testing in Populations at Risk

HIV Testing in STI and TB Patients in the Hospital



HIV Testing in Partners of New PLWH

No data

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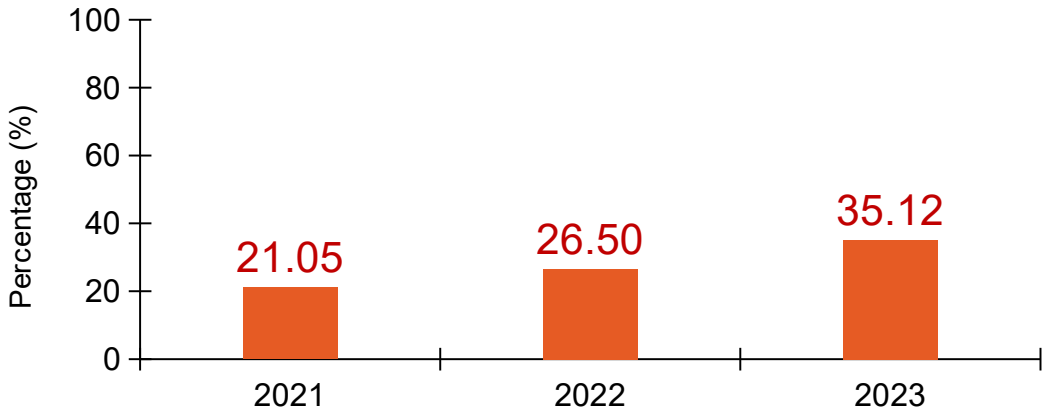
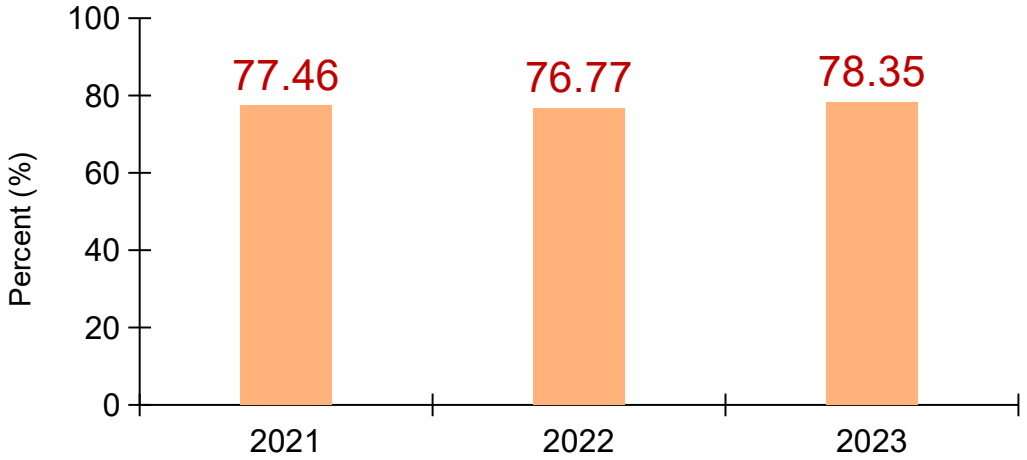
HIV Testing in Populations at Risk

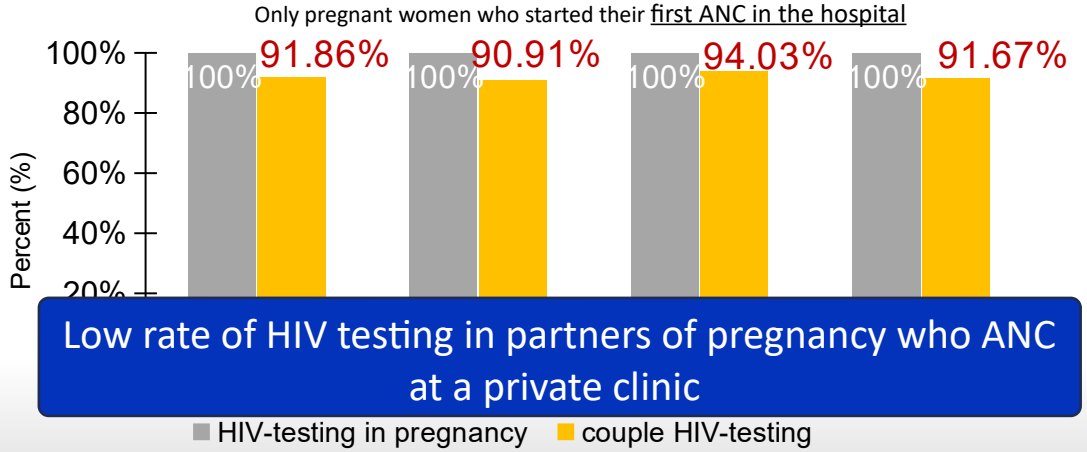
HIV-Testing in STI-Patients in the Hospital



HIV Testing in TB-Patients in the Hospital



HIV Testing in Pregnancy and Partners

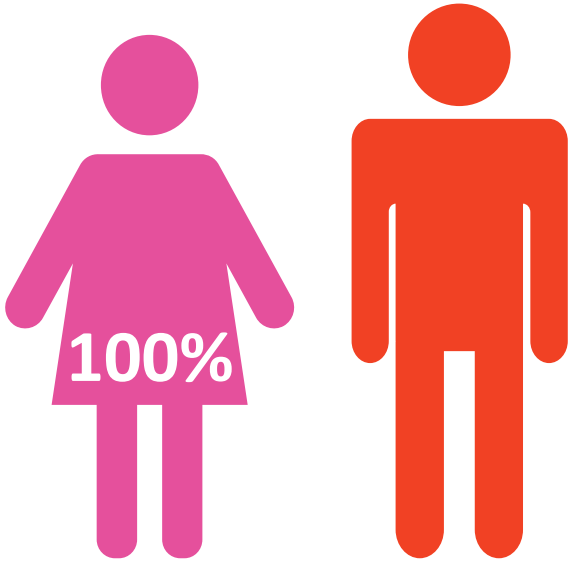


Low rate of HIV testing in partners of pregnancy who ANC at a private clinic

HIV Testing in Partners of new PLWH

No data

HIV Testing in Partner's of Pregnancy



2021 0.0789

2022 0.0882

2023

2024

Couple couseling ANC service for first ANC in the hospital (group 1)

1 Start first ANC service in the hospital

2 Start ANC service at the private clinic, then refer to the hospital

***3** **A private clinic provides ANC throughout the pregnancy period**

4 NO ANC

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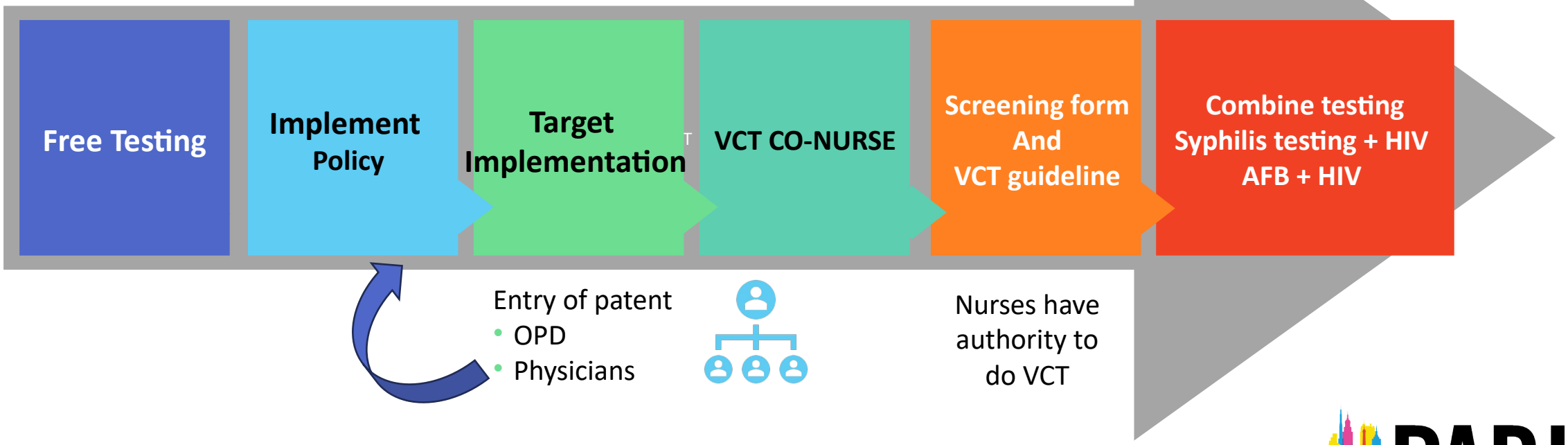
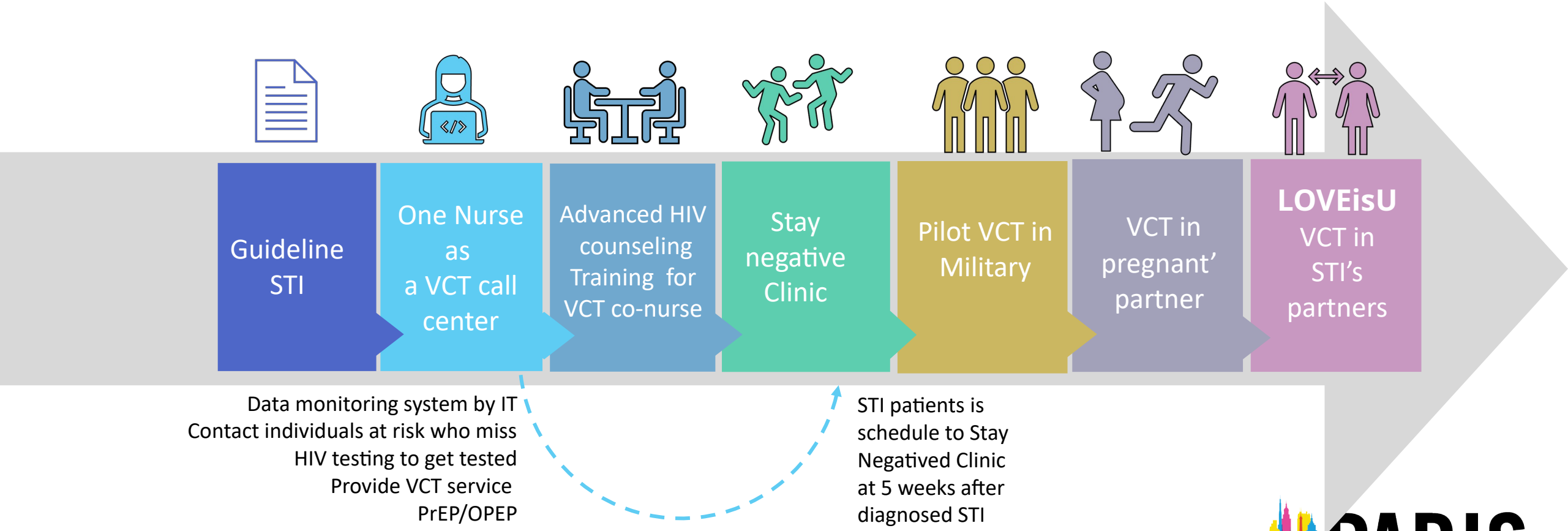
Achieving 95[1]: Used Data to Design System (1)

Screening form asking by clerk at OPD 2, 7, 9	
Symptoms	Yes
Discharge from genital meatus	
Dysuria in male	
Pain or painless ulcer at genital area	
Mass at genital area	
Rash on palm and sole	
Voluntary to do HIV testing	
Counseling for PEP	
Any symptoms that suspected to be STI	

Communication
Group/one on one

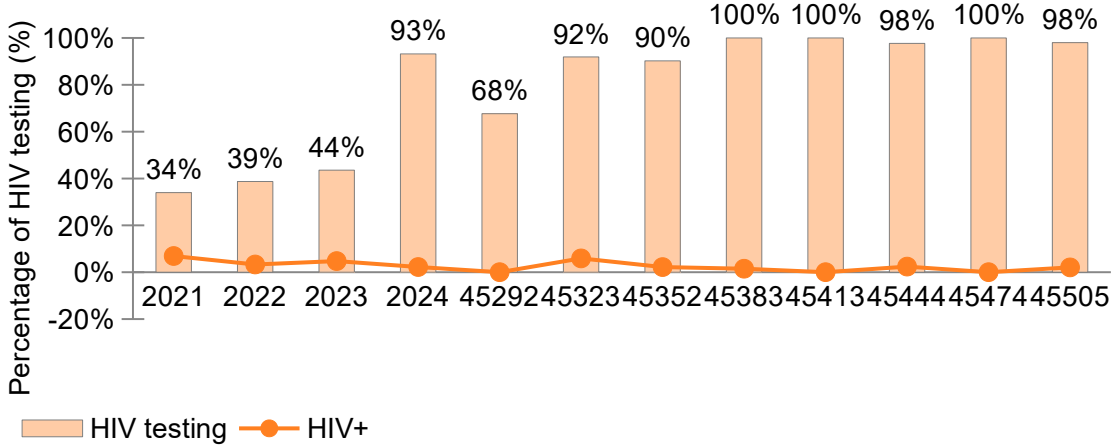


Achieving 95[1]: Used Data to Design System (2)

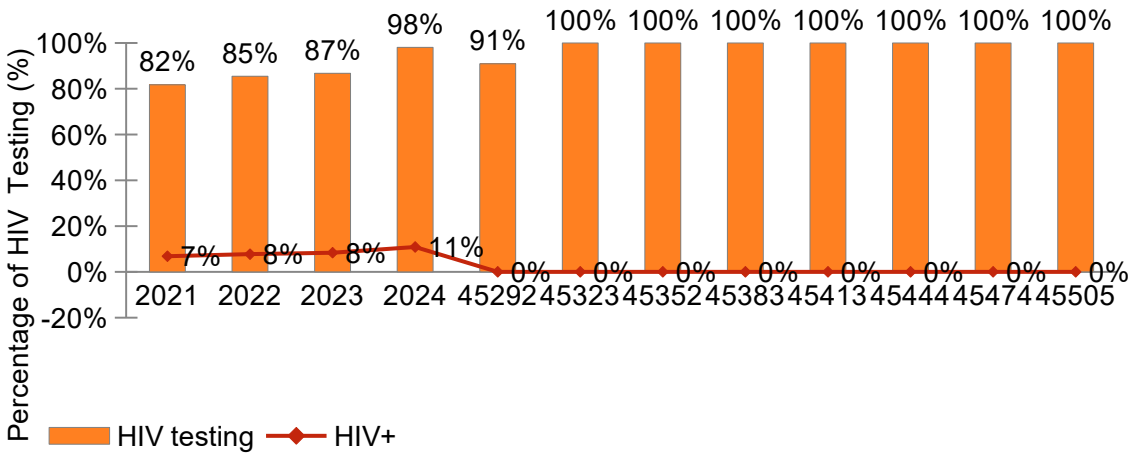


HIV Testing in Populations at Risk

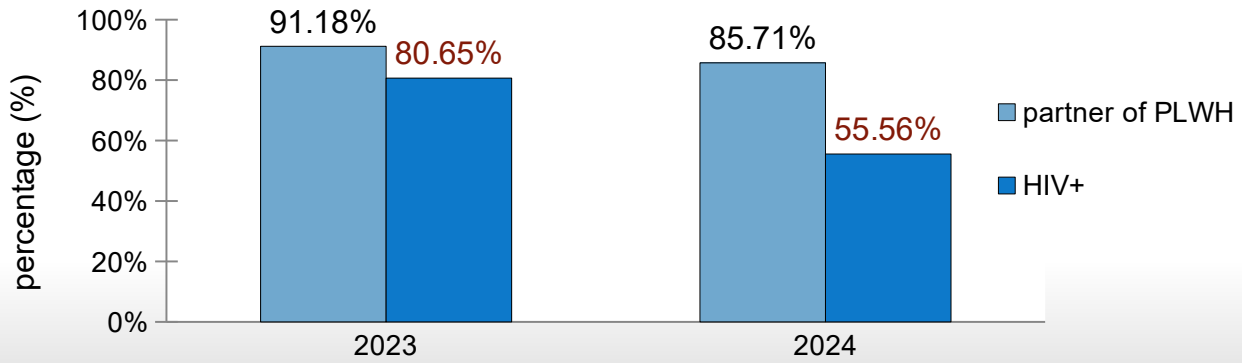
HIV Testing in STI-Patients in the Hospital



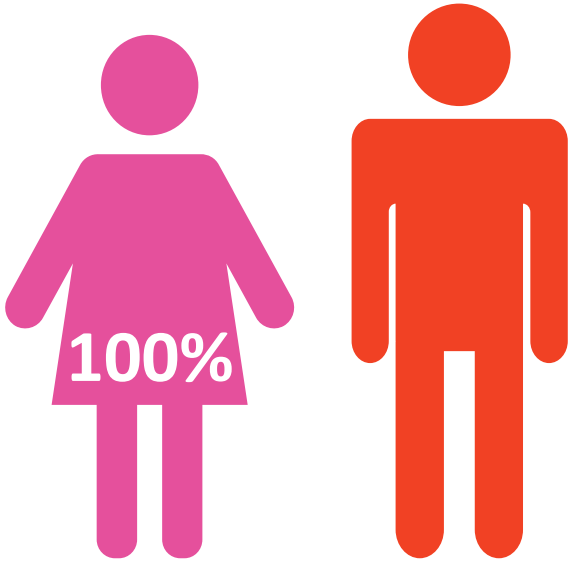
HIV-Testing in TB-Patients in the Hospital

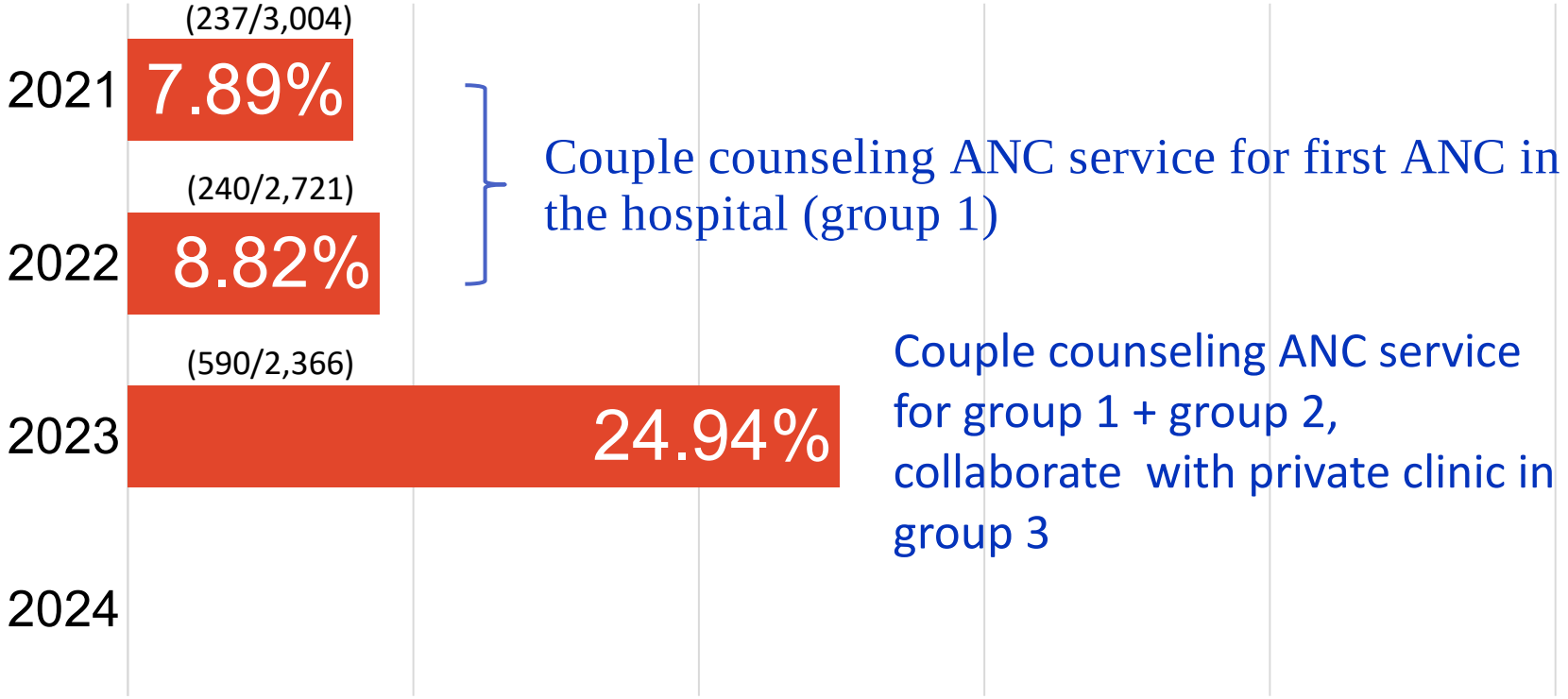


HIV Testing in Partners of New PLWH



HIV Testing in Partner's of Pregnancy





Couple counseling ANC service for first ANC in the hospital (group 1)

Couple counseling ANC service for group 1 + group 2, collaborate with private clinic in group 3

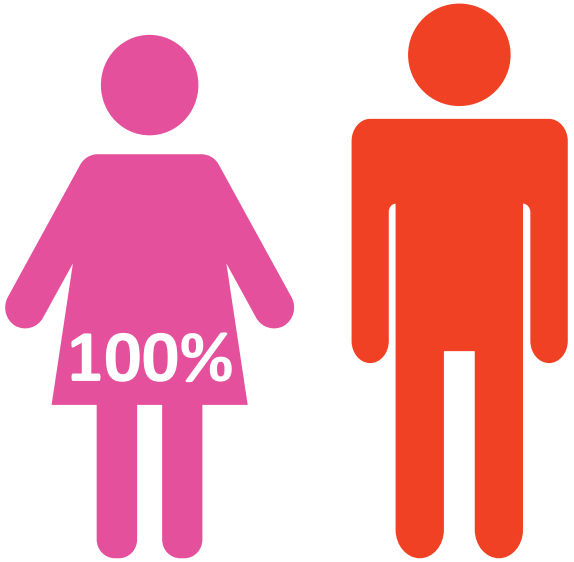
1 Start first ANC service in the hospital

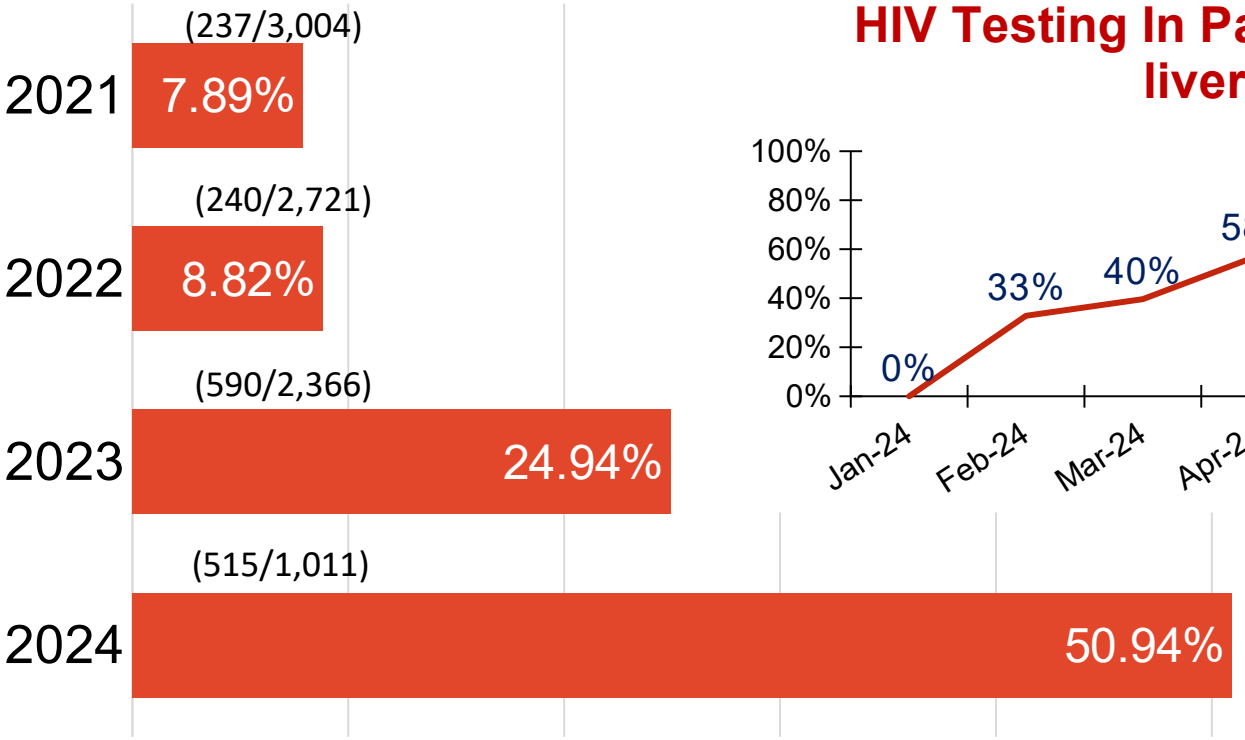
2 Start ANC service at the private clinic, then refer to the hospital

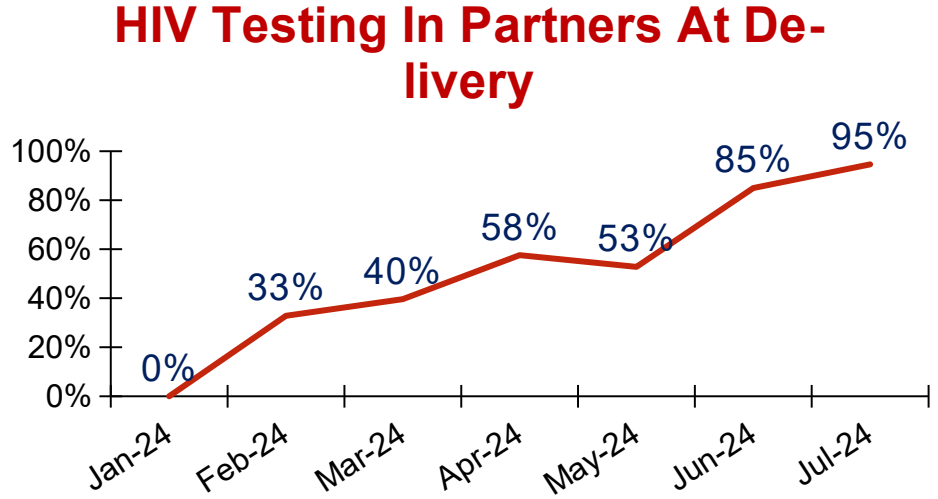
*3 **A private clinic provides ANC throughout the pregnancy period**

4 NO ANC

HIV Testing in Partner's of Pregnancy







Offer partners **(group 3)** for HIV testing at delivery

1 Start first ANC service in the hospital

2 Start ANC service at the private clinic, then refer to the hospital

*3 **A private clinic provides ANC throughout the pregnancy period**

4 NO ANC

Linkage to Care

Pre-intervention

10%

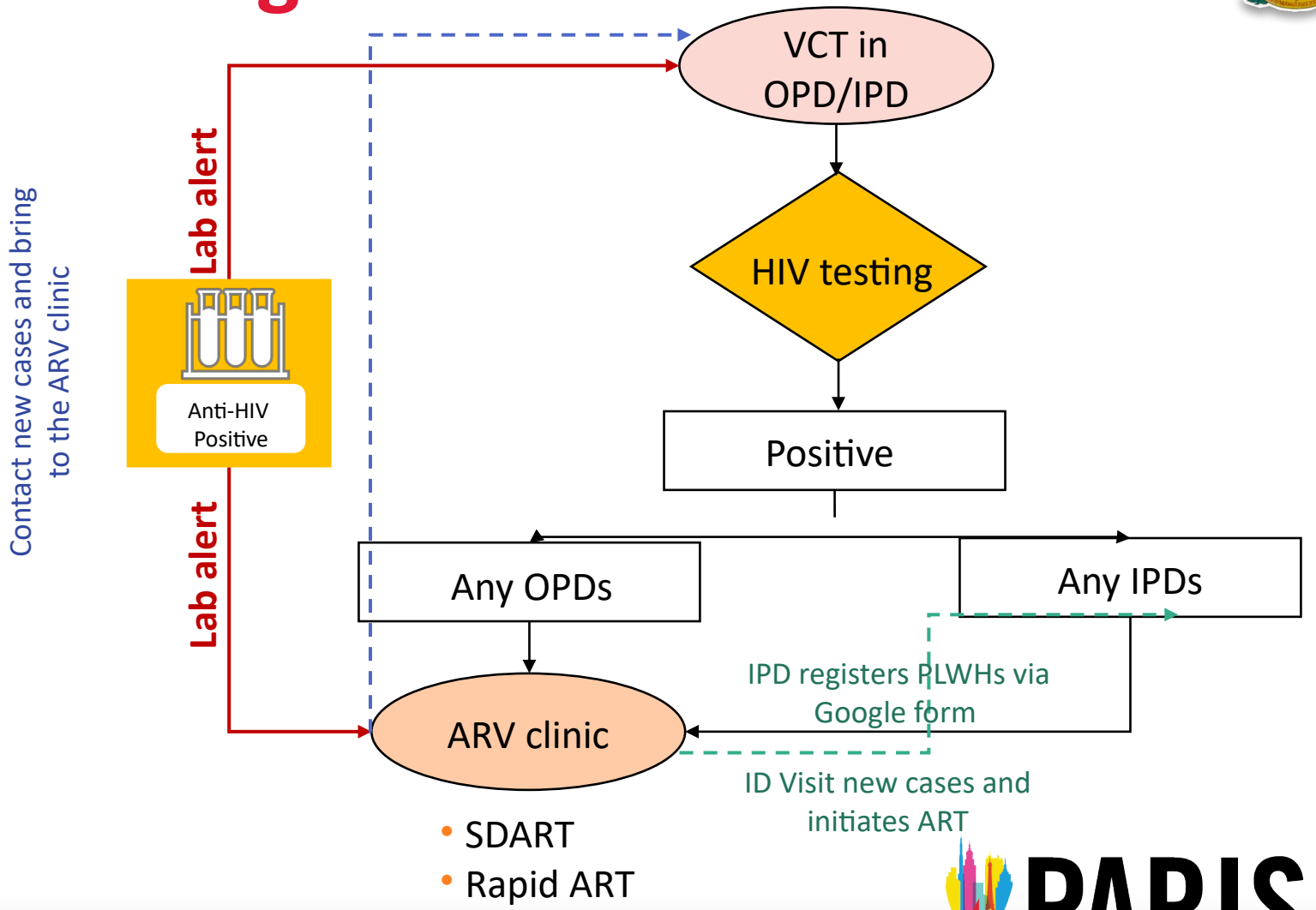
Enter to HIV care

Two new cases of HIV+ from the lab did not register in HIV care program since 2021 and presented with severe OIs in 2023

- No HIV+ lab alert
- HIV testing without same-day result
- Ineffective linkage system

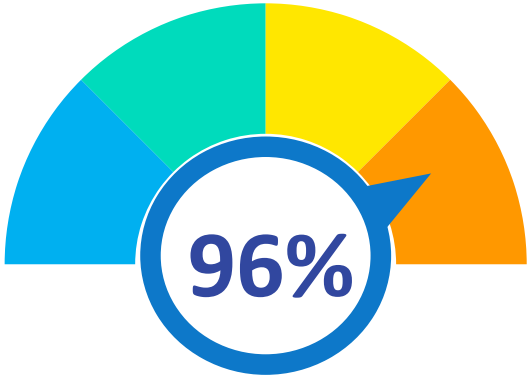
Fail to bring new PLWHs to HIV care

Chart review
Care process review



Linkage to Care

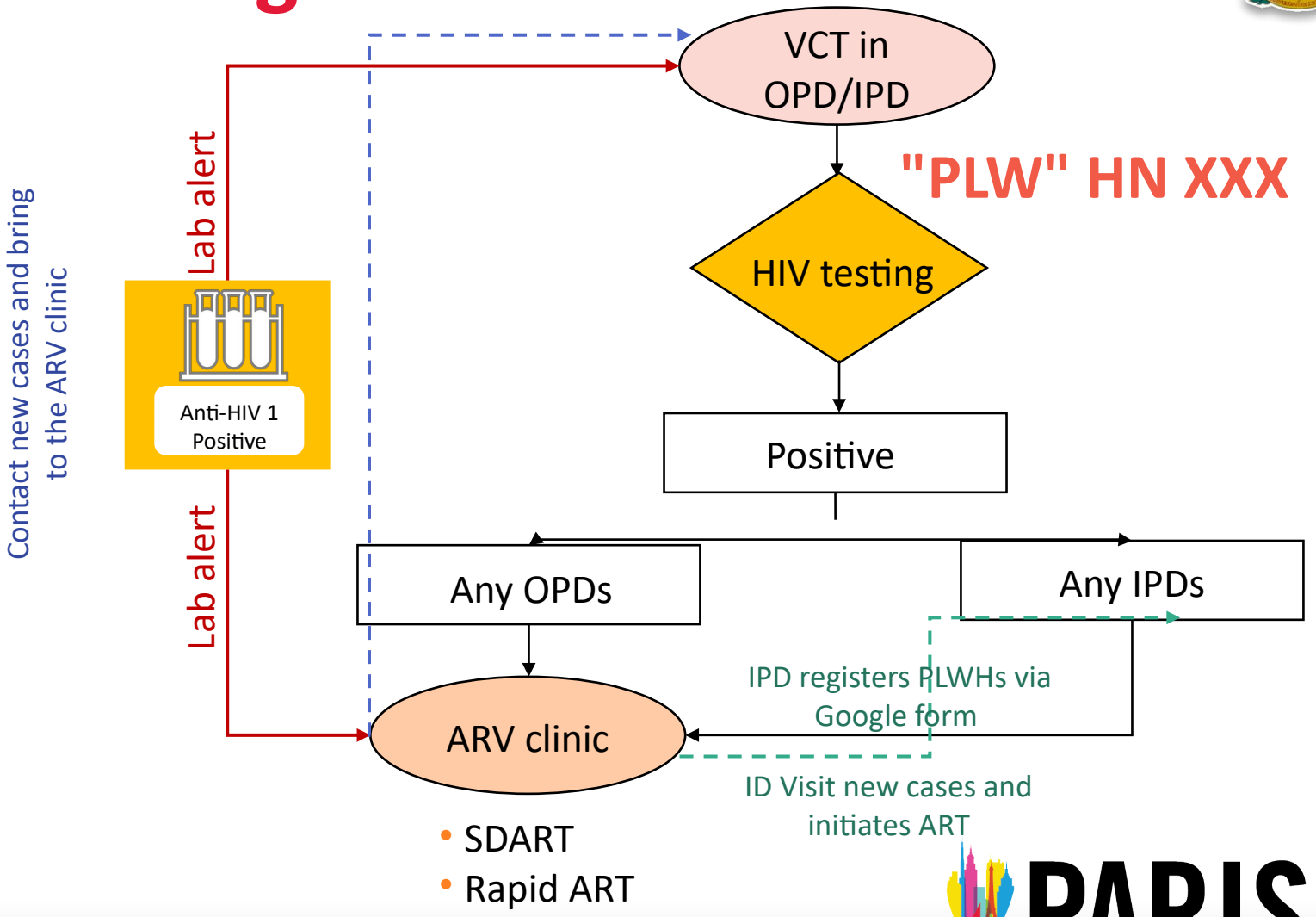
Enter to HIV care



2023 (164/172)

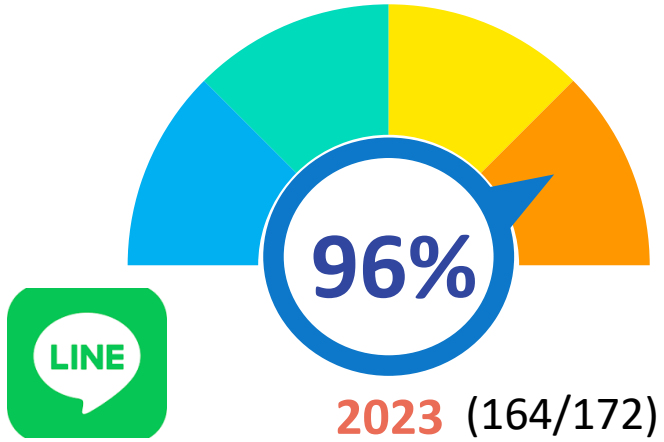
LINE

24-hour alert

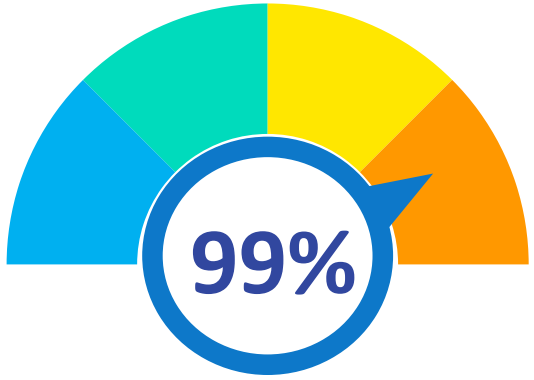


Linkage to Care

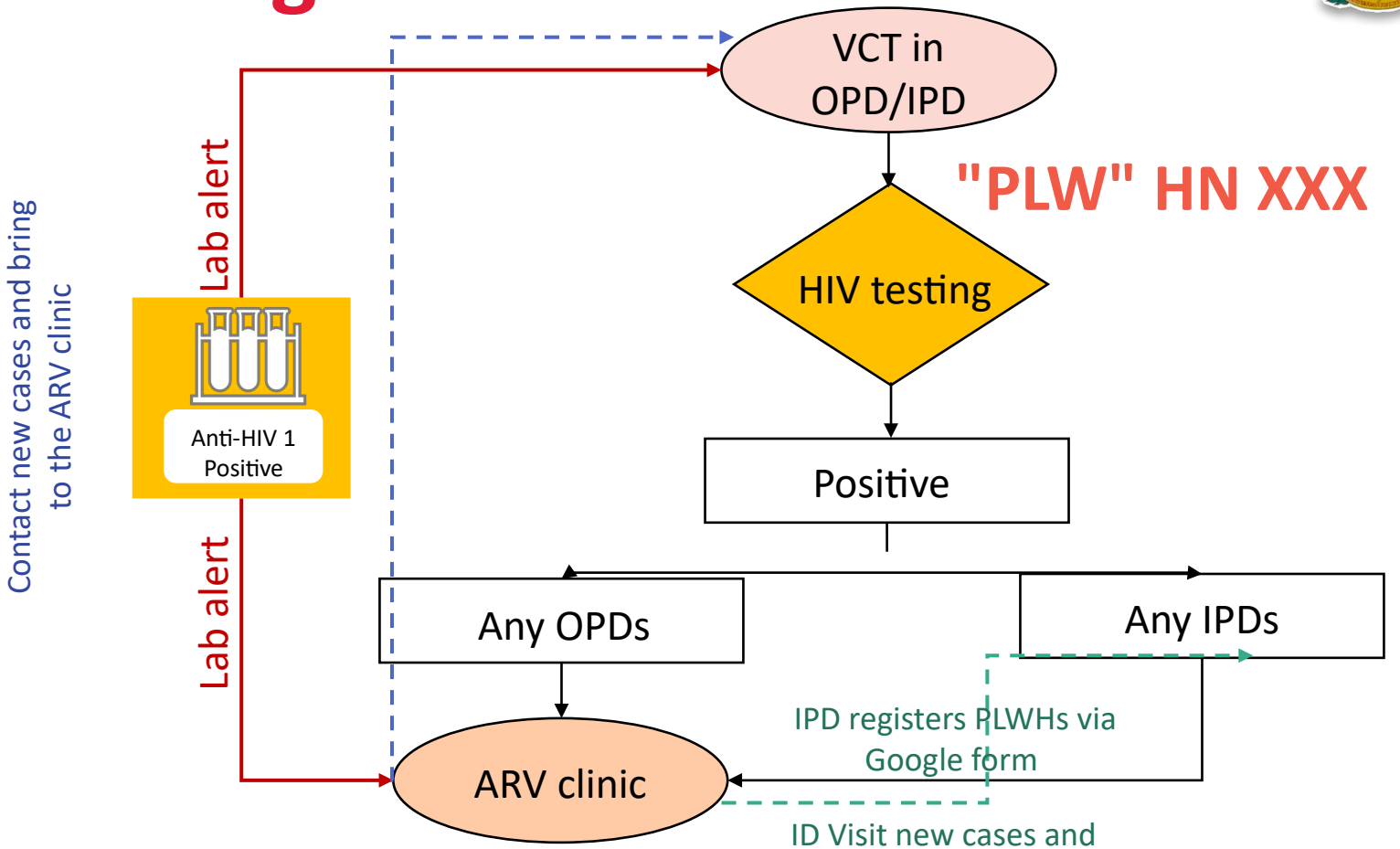
Enter to HIV care



2023 (164/172)



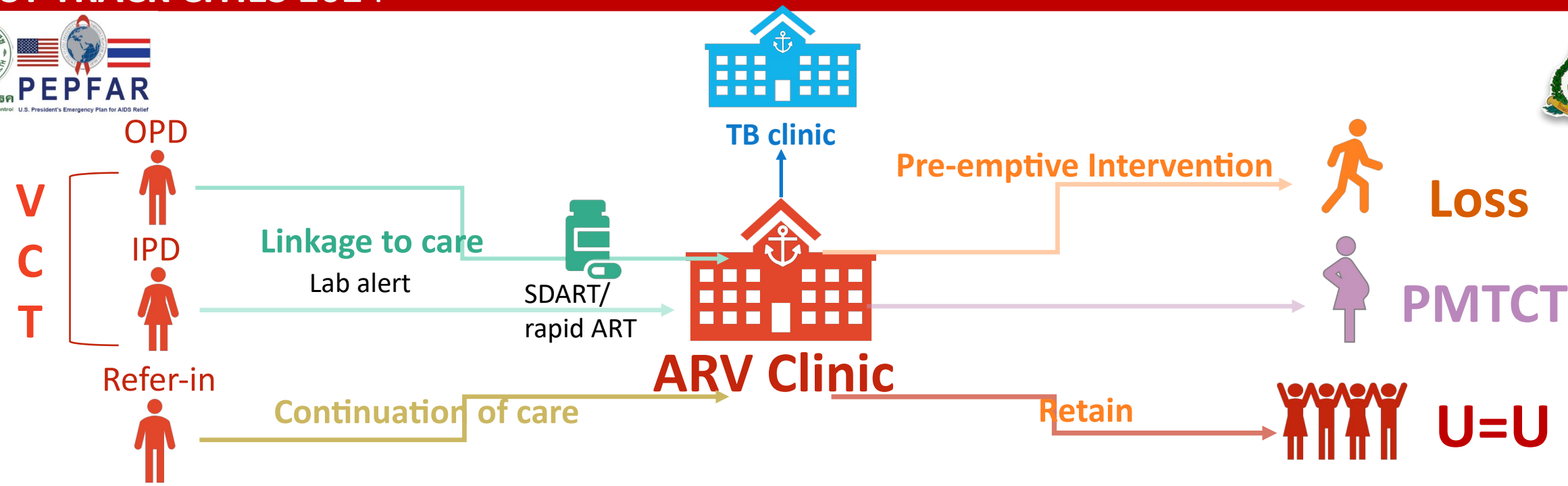
2024 (72/73)



95-2

ARV CLINIC

FAST-TRACK CITIES 2024



Intervention

- Alert HIV+ result
- New PLWH entry to care
- Sameday/rapid ART protocol
- Empowerment in new PLWH

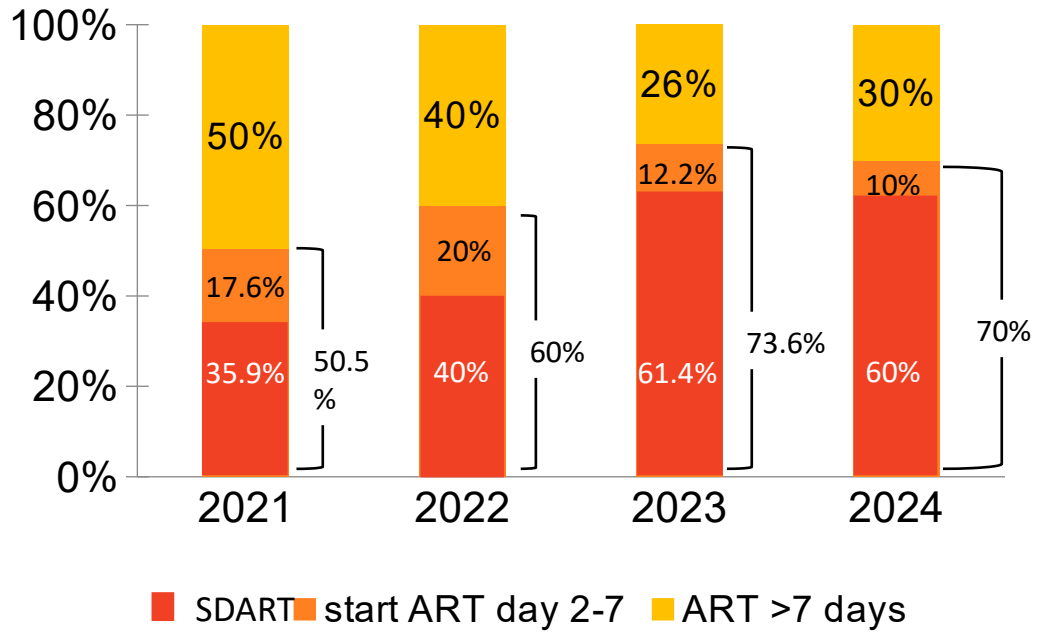
- Refill ART by HIV co-nurse
- ARV delivery service
- ARV stock
- Clear roles of all staff

- Weekend lab test
- VL testing at early of the year
- HIV drug resistance testing
- Alert VL >1,000 copies/mL
- Alert CrypAg+ in CSF positive
- Extended-hour ARV clinic
- EAC

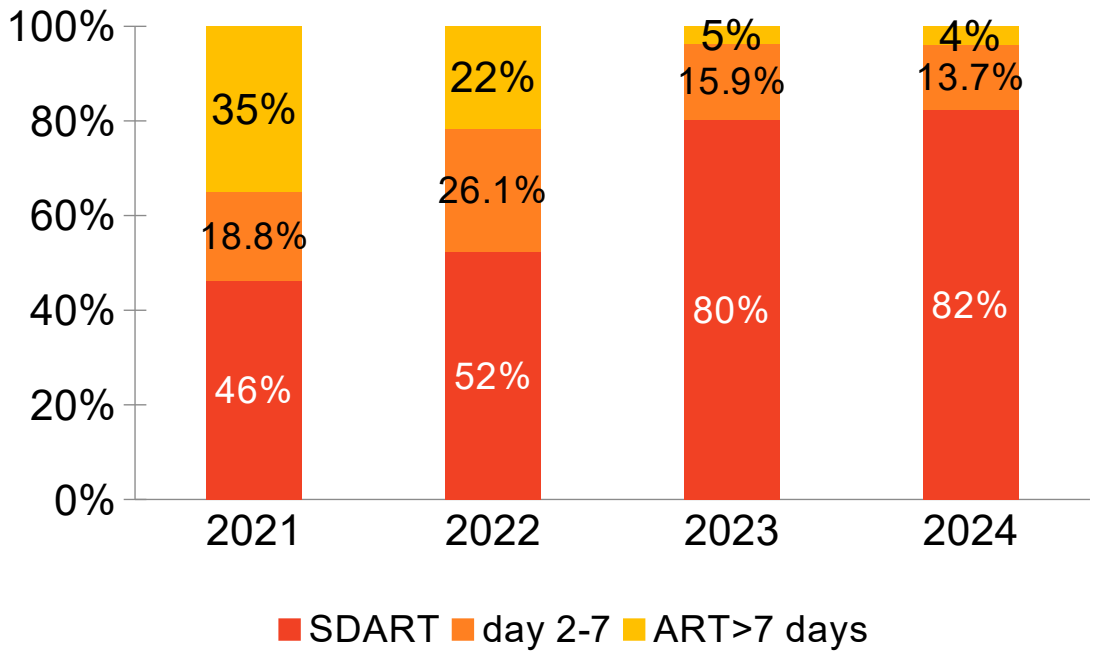
- Screen and identify high-risk with 9 criteria
- S&D evaluation
- Multiple communication channels
- Re-entry to care in loss to follow-up
- Telemedicine

ARV Initiation

ART Initiation in All New PLWH



ART Initiation in New PLWH without OI



2021

- SDART in selected patients
- Only doctor start ART

2022

- SDART protocol
- ARV do SDART in some patient

2023

- SDART checklist
- Scale-up SDART
- ARV counseling by a pharmacist

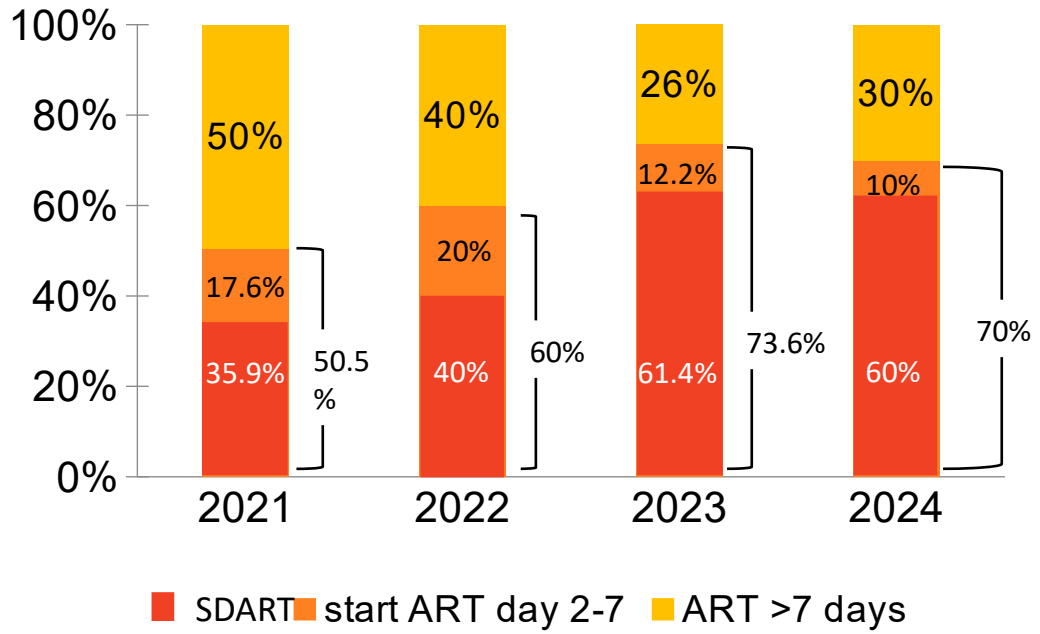
2024

- Follow-up by volunteers within 7 days

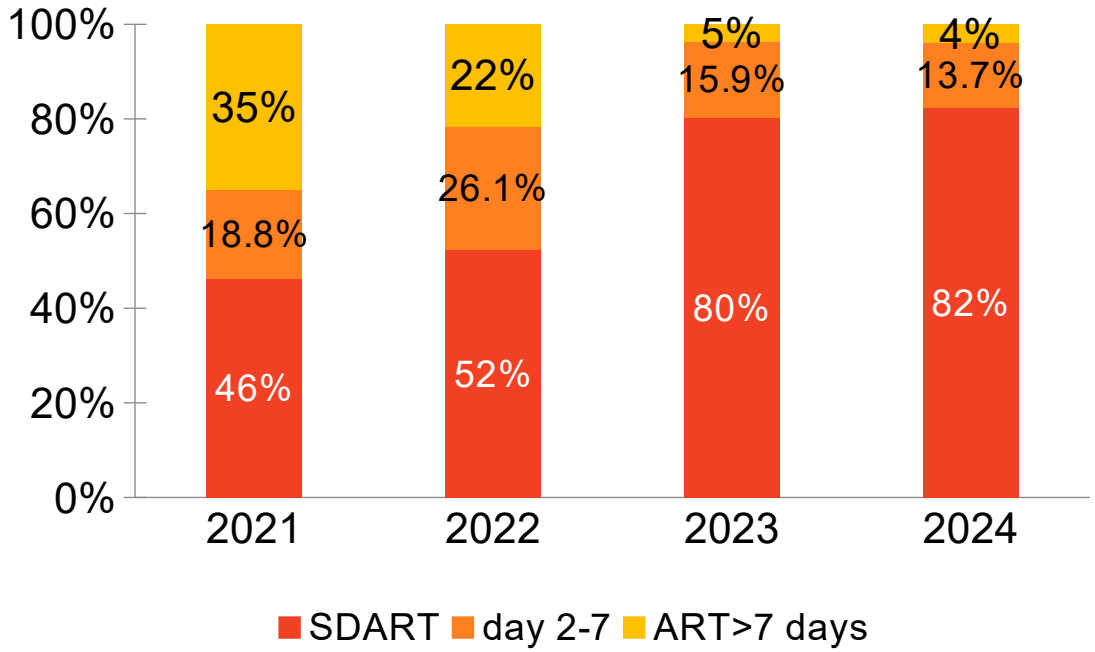
PARIS FAST-TRACK CITIES 2024

ARV Initiation

ART Initiation in All New PLWH



ART Initiation in New PLWH without OI



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2024

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Pre-emptive Approach

Loss Follow-up within 30 days

1. Repeatedly missed appointment with prior undetectable VL
2. Transfer from another hospital within the past two years
3. Recruits

Offer telemedicine

- VL undetectable
- No co-morbidity
- No history of drug resistance

For recruits….Identify

- End of basic training/transfer to assigned units
- Assigned unit
- Drill Instructor
- End of active duty

- ☑ New partner/ end relationship
- ☑ New job/ plan change job
- ☑ Resign/ plan to resign
- ☑ Move or plan to move residence
- ☑ History of loss to F/U or frequent missing appointment
- ☑ The residence is outside inventory 6
- ☑ Loss their loved one
- ☑ HIV VL >1,000
- ☑ Teenager

Loss to Follow-up at 60-90 days or return to care after loss F/U

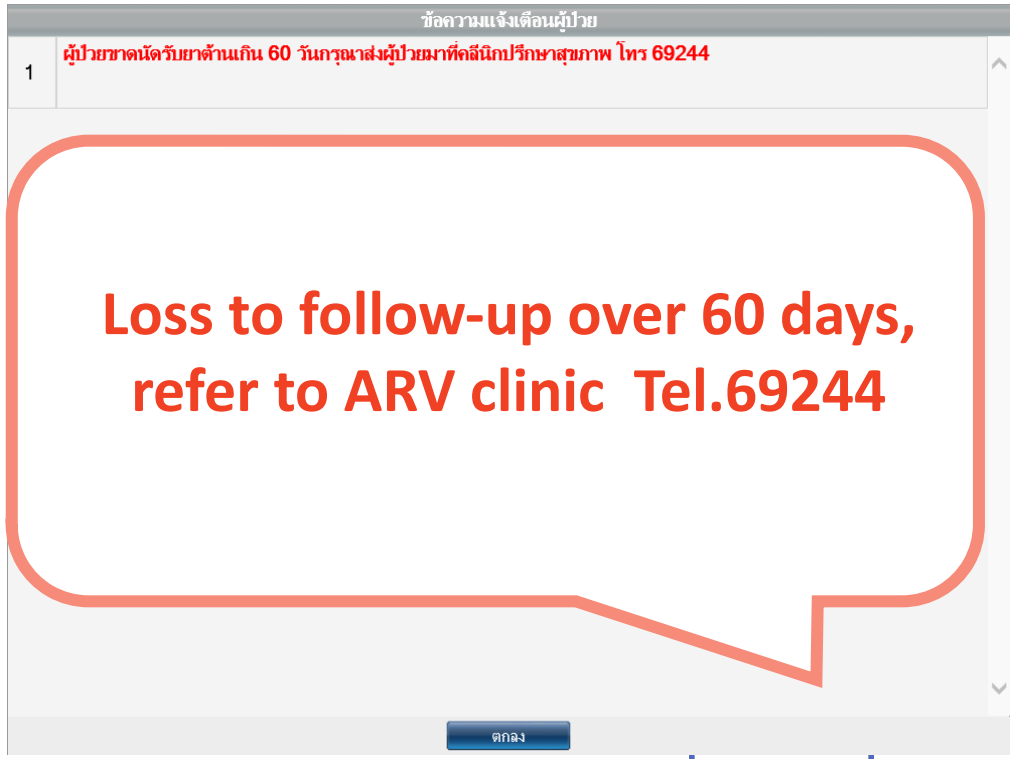
1. Poor ARV compliance
2. Repeatedly loss to F/U
3. Occasionally, unsuppressed HIV VL
4. History of drug resistance

Identify the patient at the screening point on the day that the clients reach the clinic

S&D evaluation

ARV adherence counseling

Tracking Loss to Follow-up



0

1

7

1

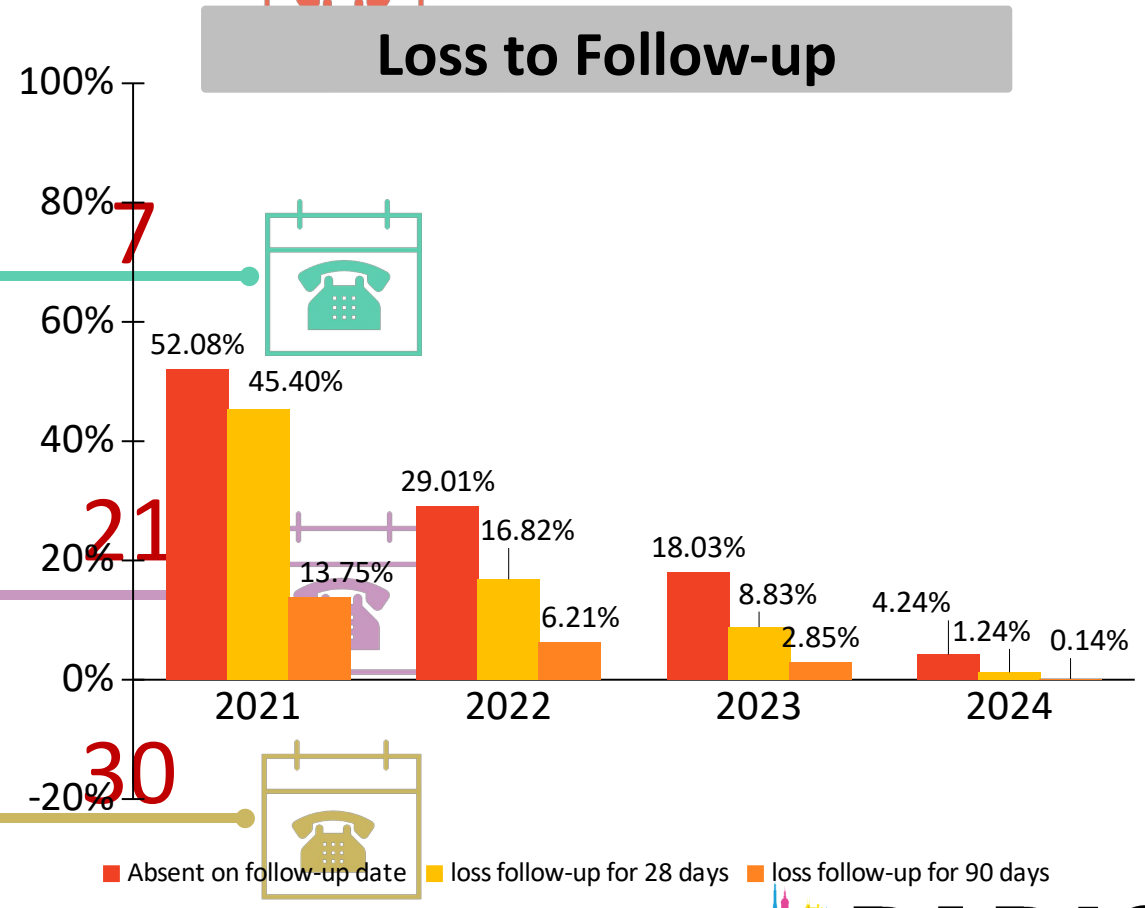
21

30

60

90

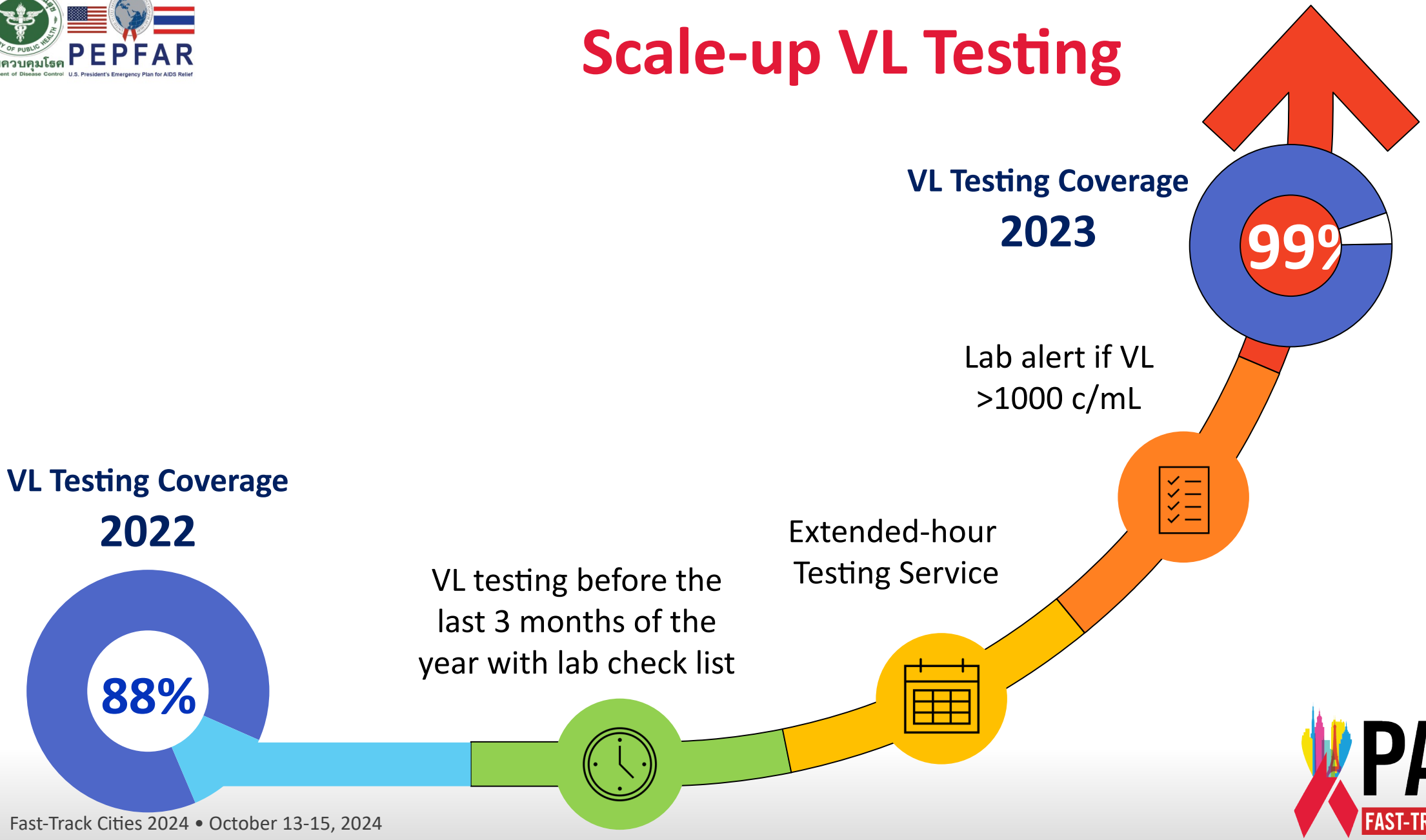
Loss to F/U



95-3

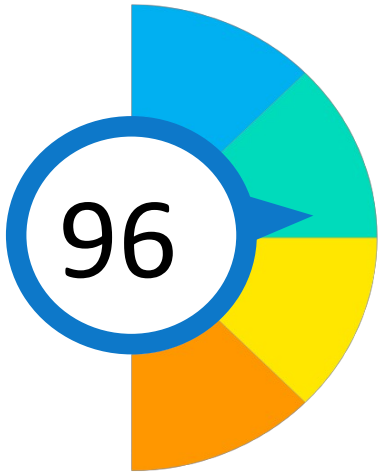
Suppressed HIV Viral Load

Scale-up VL Testing



HIV Treatment Cascade in 2023

Linkage to Care



New 172

Entry to care 164

On ART

PLWH 2,896

On ART 2,867

VL Testing Coverage

PLWH* 2,741

VL testing 2,715

Viral Suppression

PLWH* 2,741

VL <50 2,655

*PLWH on ART >12 months

Data updated on 31 July 2024

HIV Treatment Cascade in 2024

Linkage to Care

New 73
Entry to care 72

On ART

PLWH 2,832
On ART 2,813

VL testing coverage

PLWH* 2,767
VL testing 2,730

Viral suppression

PLWH* 2,767
VL <50 (on ART) 2,643

*PLWH who on ART >12 months

Hospital's Efforts to Address HIV-related Stigma and Discrimination

Recognize S&D in the organization, and it's our priority.

Provided executive with the data from the questionnaire

"Over 50% of HCW think that PLWH should not have baby"

Rise awareness "what is S&D?"

Provide online learning material, Communicate directly with HCW

De-identify PLWH

No sign
No Isolation
Use numbers instead of name-calling clients in ARV clinic

Change wording to communicate among HCW

"PLW"

Normalized HIV testing

It's free, and everyone can get tested.
Add HIV testing in annual check-ups (voluntary)

Frequently asked questions from HCW: "Is our action S&D?"

Conclusion

- Optimizing HIV care requires:
  - Collaborative, data-driven approaches
  - Continuous quality improvement: PDCA method
- Key success factors
  - Staff engagement and commitment
  - Targeted interventions guided by data analysis
- Outcomes achieved:
  - Significant progress toward 95-95-95
  - Improved testing, treatment, and retention to care

Acknowledgement

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Quality Management Center
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VCT co-nurse
All patients and healthcare providers of
Somdech Phra Nangchao Sirikit Hospital