



# HIV care cascade

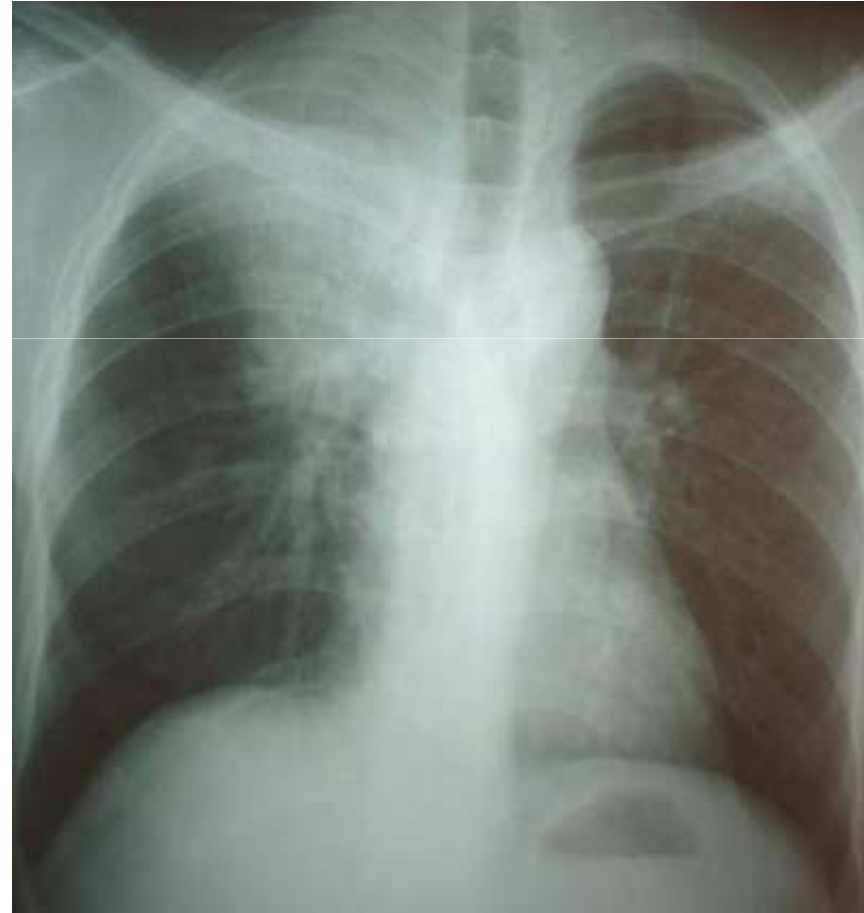
Dr Suresh Kumar

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Hospital Sungai Buloh

# Sputum positive TB

- Diagnose early
- Start treatment as soon as possible
- Ensure compliance to treatment



# HPTN 052



- Can ART prevent prevent sexual transmission of HIV among HIV serodiscordant couples?
- Randomised multi centre trial – 1763 HIV serodiscordant couples
- HIV positive partner started on ART immediately ('early' arm of the study) or later ('delayed' arm)
- In 2011 – 96% reduction of HIV transmission in the early arm
- After that – all were offered ART
- In 2015 – after 5 years on trial – 93% reduction of HIV transmission with ART

# HPTN 052



- Only 8 cases of HIV transmission – after starting ART
- 4/8 – HIV transmission occurred soon after ART initiation – before HIV suppression
- 4/8 – HIV transmission occurred when the HIV infected partner had detectable HIV viral load – due to treatment failure

HIV viral load suppressed = non infective



# PARTNER Study

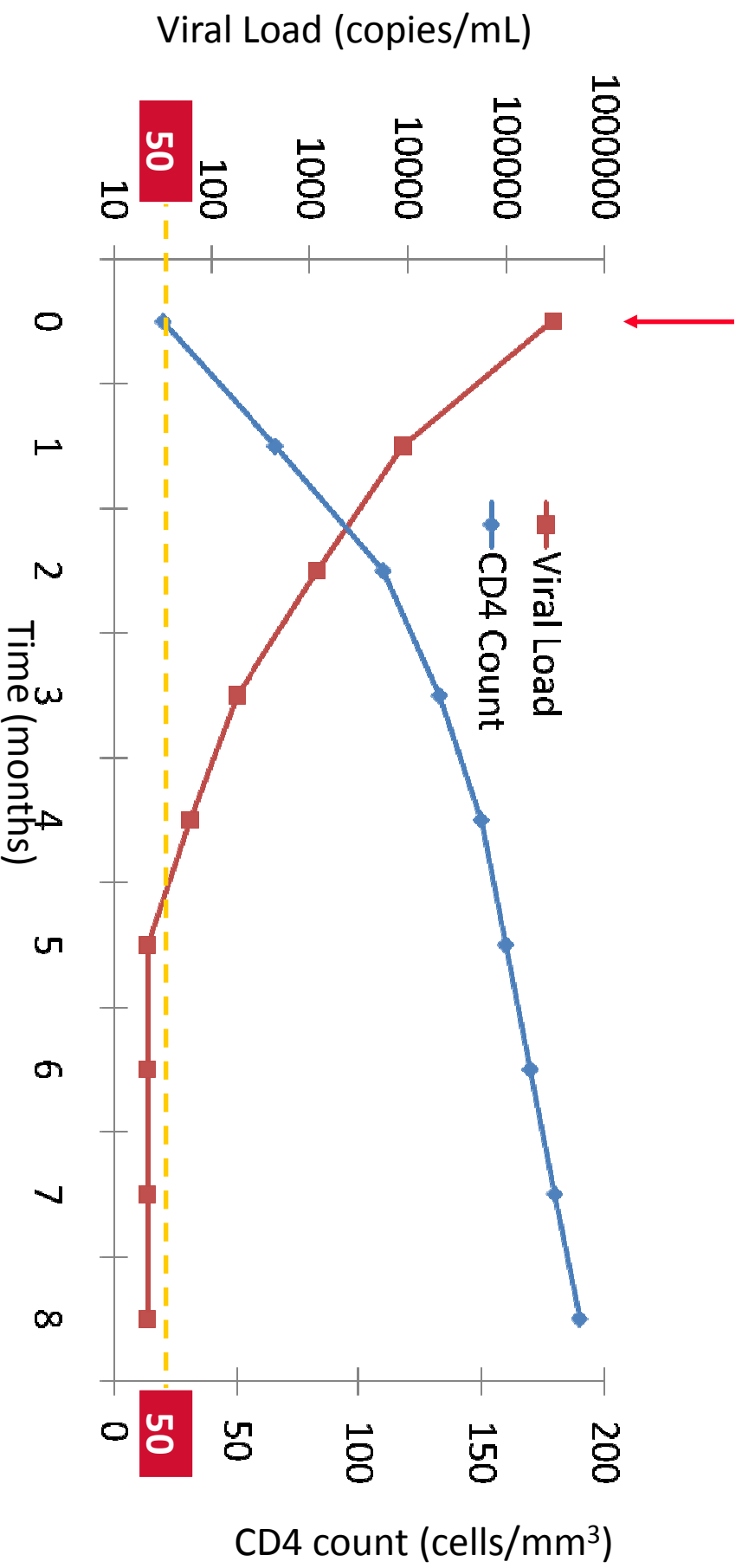


- 1166 serodiscordant couples from 14 European countries
- Undetectable viral load, not always using condoms
- How long on ART?
  - 4.8 years (IQR: 1.9 to 11.4) for gay men.
  - 7.5 years (IQR: 3.3 to 14.2) for straight women.
  - 10.6 years for straight men (IQR: 4.3 to 15.6).
- How long sex without condoms
  - 1.5 years for gay couples (IQR: 0.5 to 3.5).
  - 2.8 years for straight couples where the woman was HIV+ (IQR: 0.6 to 7.5).
  - 3.6 years (IQR: 0.7 to 11.4) for straight couples where the man was HIV+

After 58,000 sexual acts without condoms **0** transmissions

# Antiretroviral Therapy: Optimal Response

ART Initiated



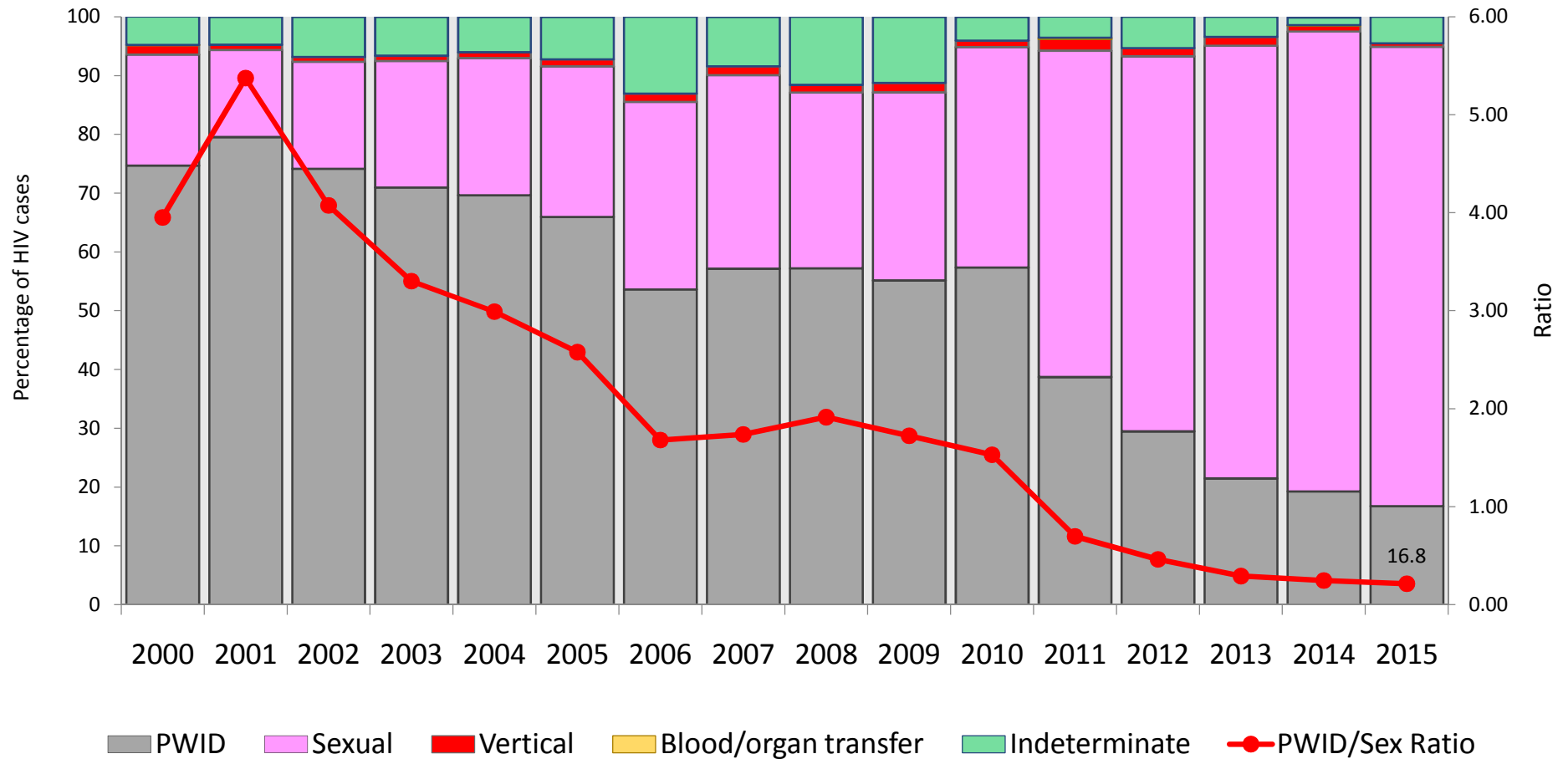


Based on experience in British Columbia, Canada

“for every 1% increase in the number of individuals suppressed on HAART, the estimated HIV incidence also decreased by 1%”

Julio S.G. Montaner et al., PLoS ONE 2014; 9(2): e87872

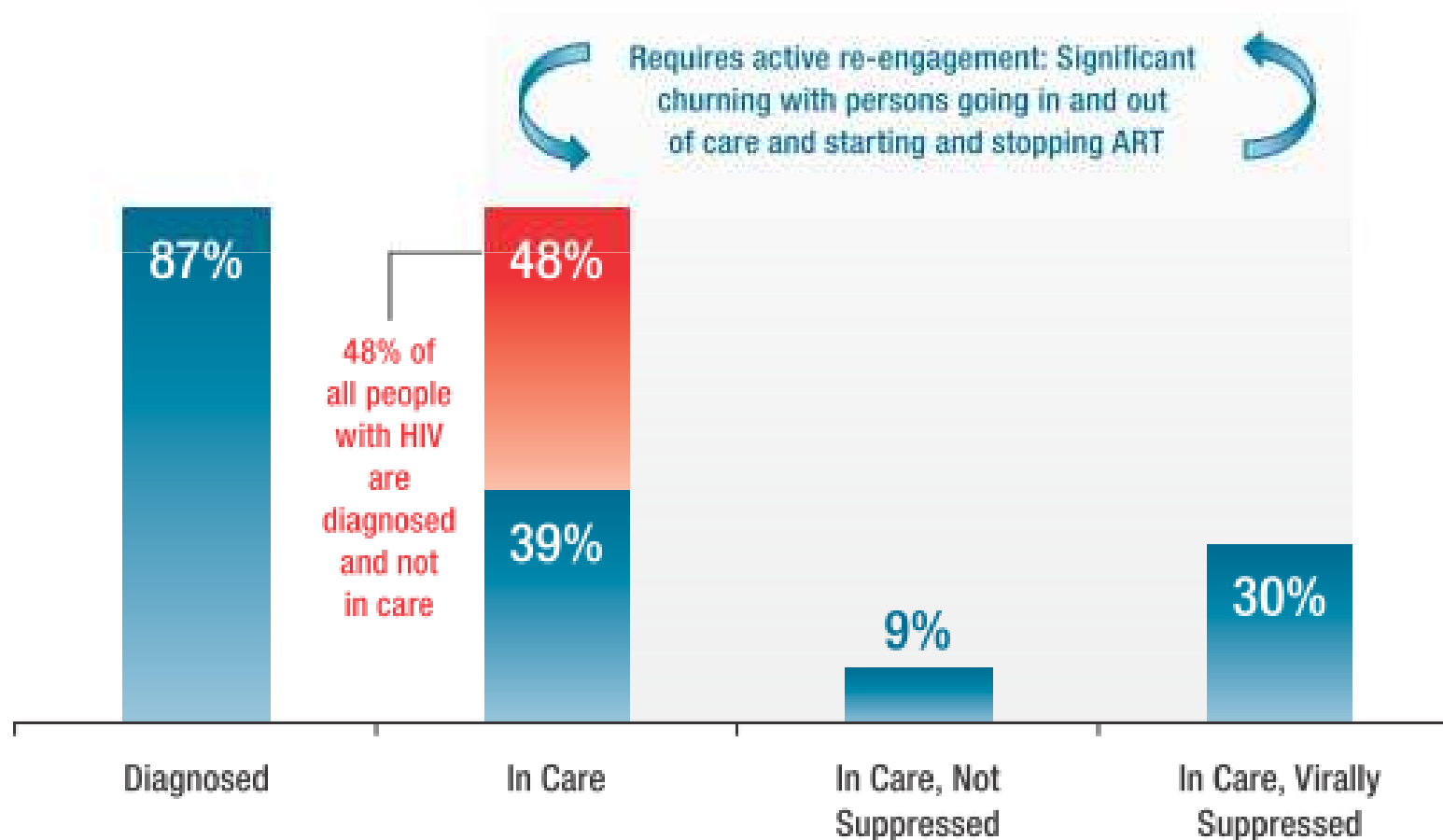
# Changing trend of HIV transmission mode, Malaysia 2000-2015



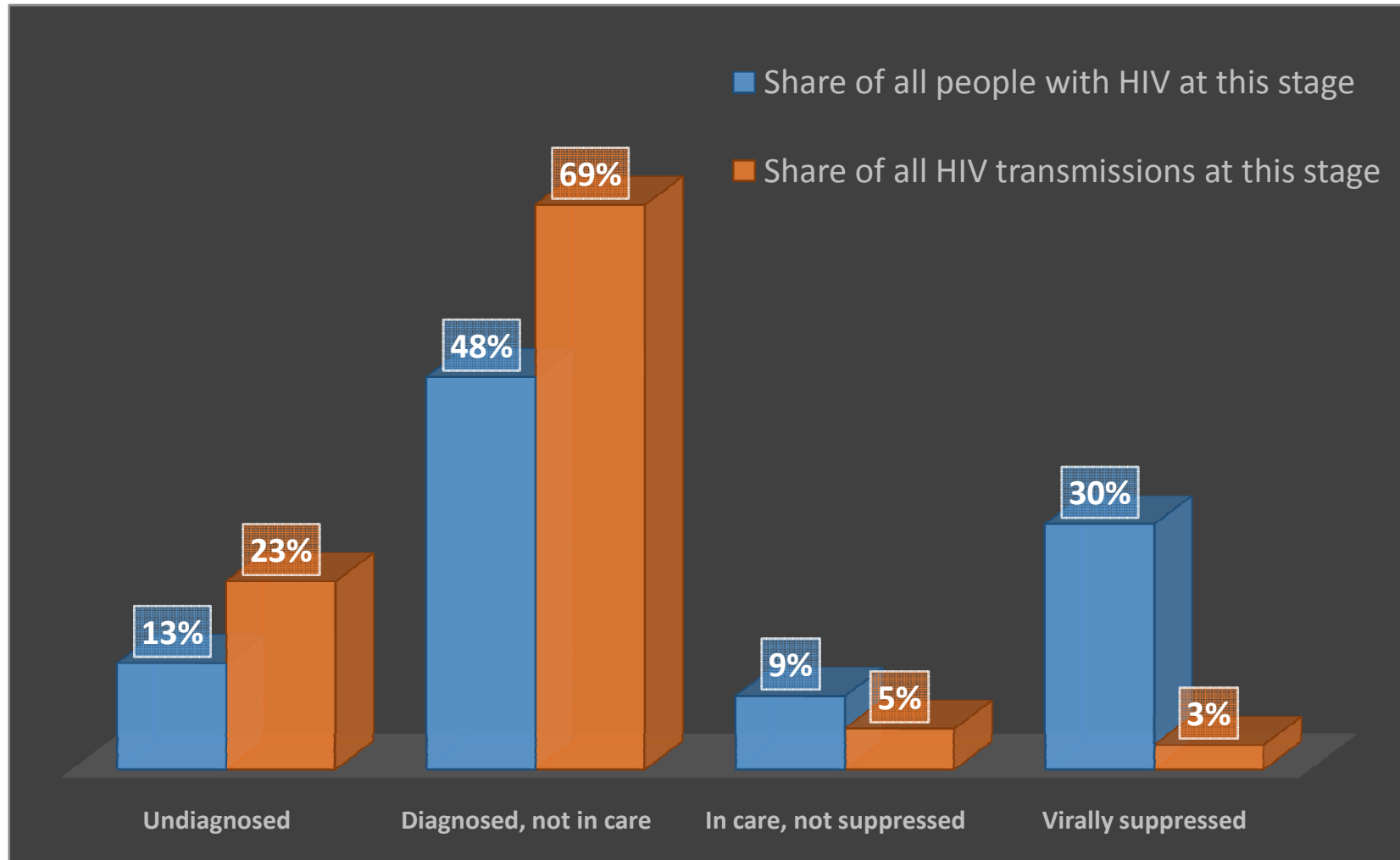


# HIV Care, USA 2012

Share of all people with HIV at this stage



# Estimated HIV transmissions, USA 2012

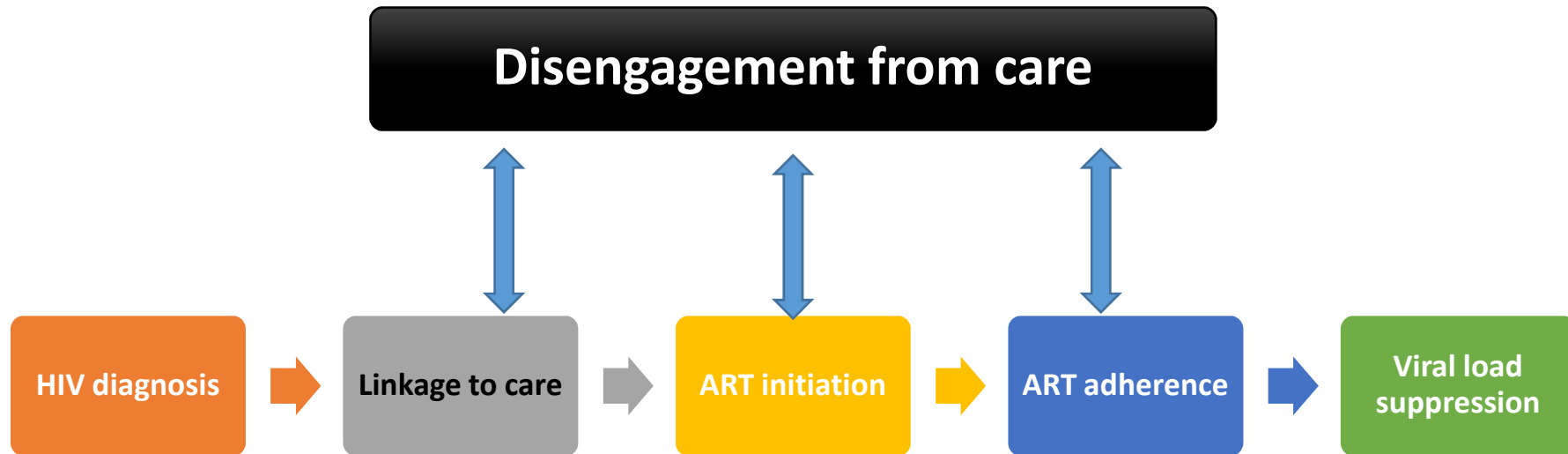




# The HIV CARE CASCADE

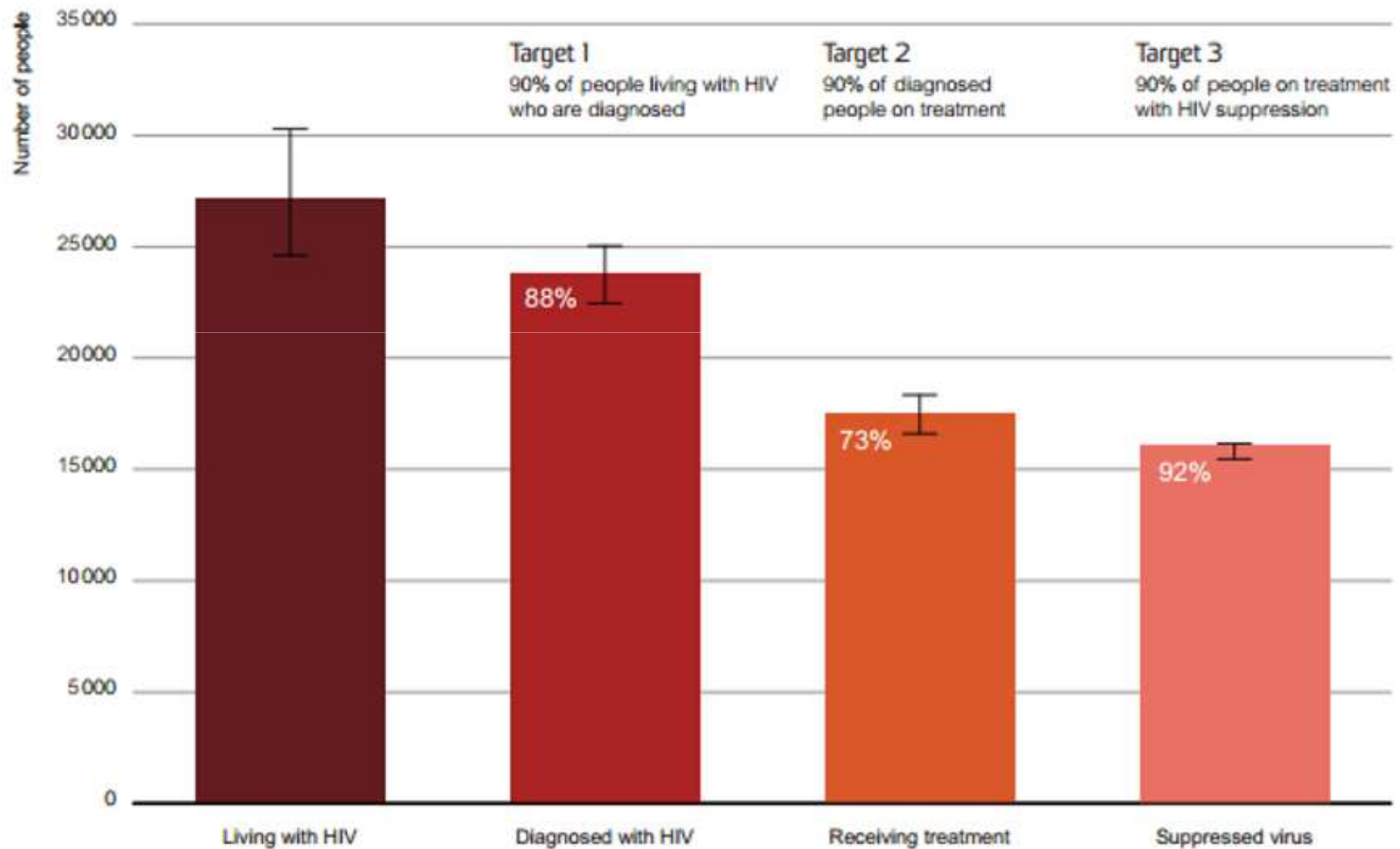
The steps involved in  
achieving virological  
suppression

# HIV care cascade

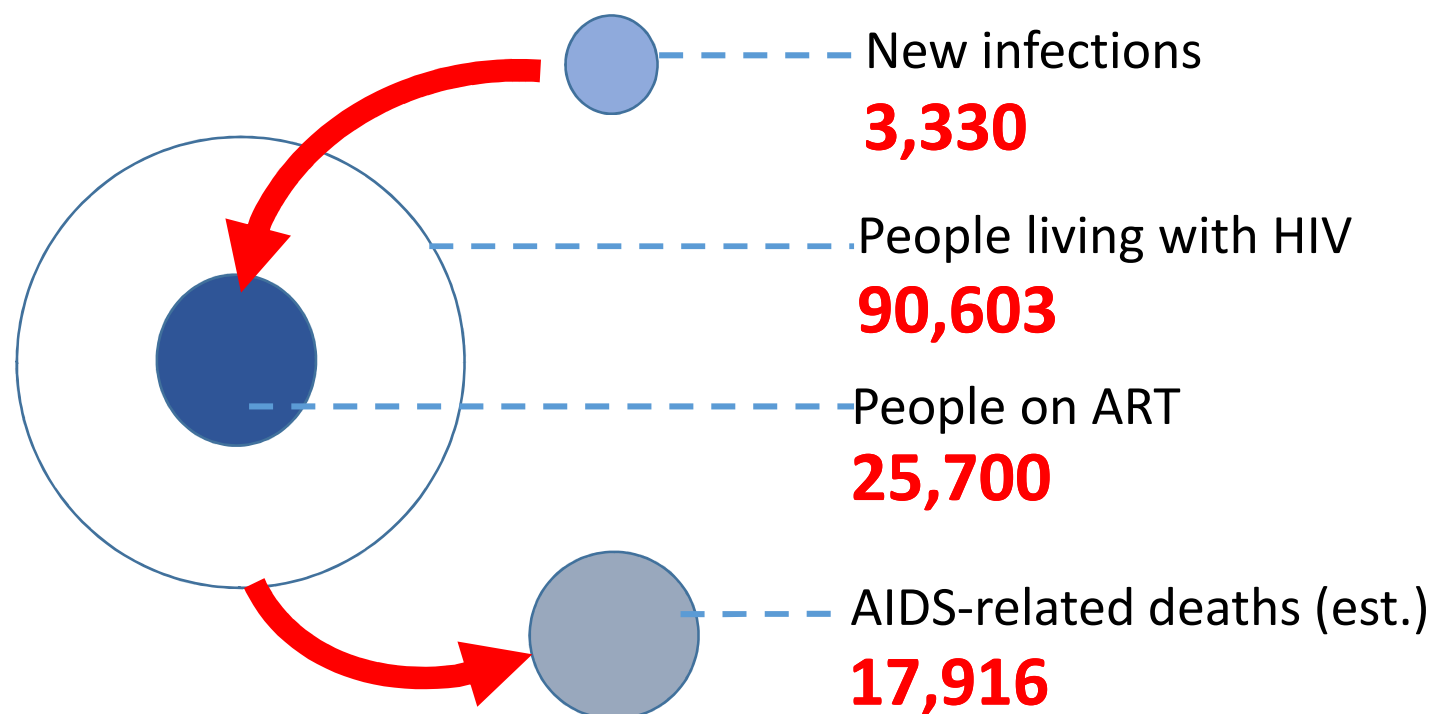


*“Seek, Test, Treat & Retain”*

# Australia 2014

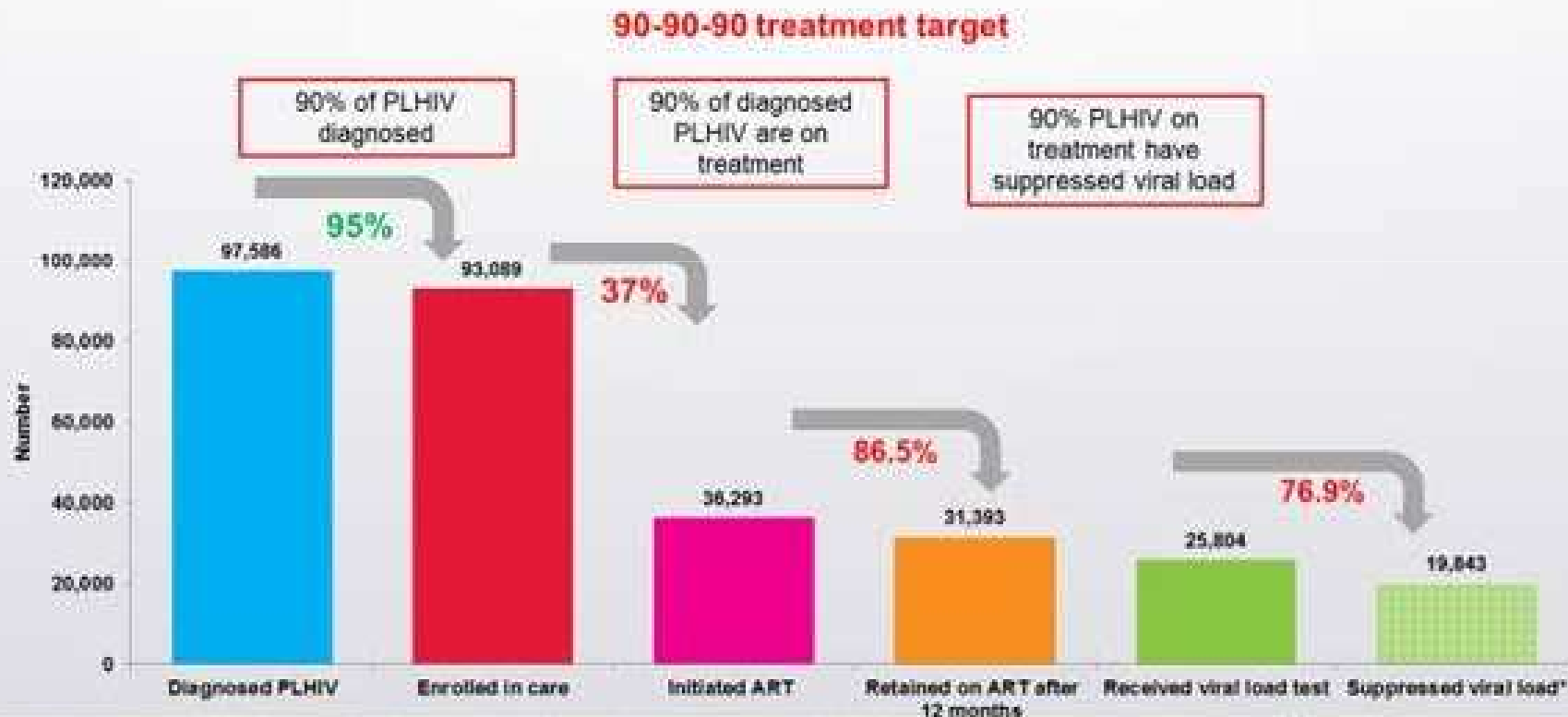


## Snapshot of HIV infection – Malaysia - 2015



# Treatment cascade - Malaysia 2016

14

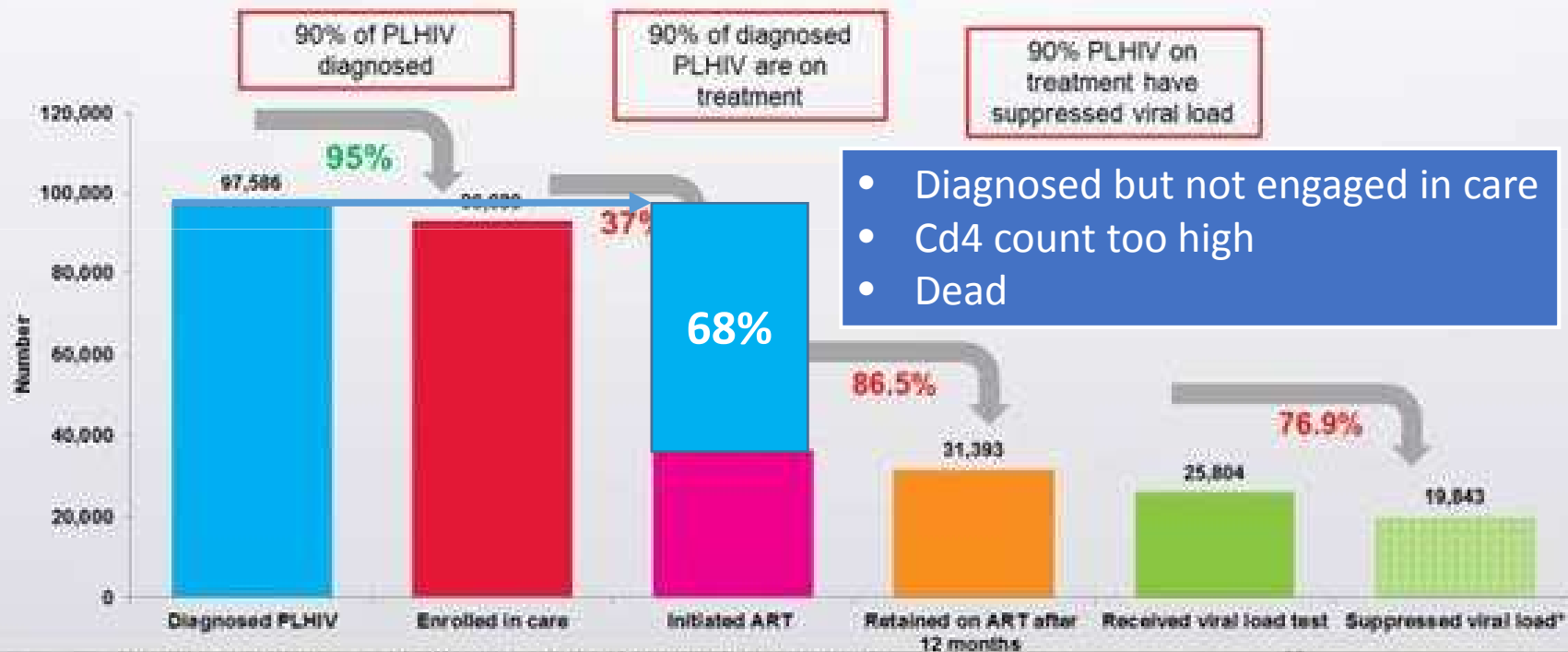


\*\* Number of patients on ART who ever have tested for VL in the last 12 months.

\* Number of patients on tested for VL and have VL of <1000copies/ml in the last 12 months

# Treatment cascade - Malaysia 2016

## 90-90-90 treatment target

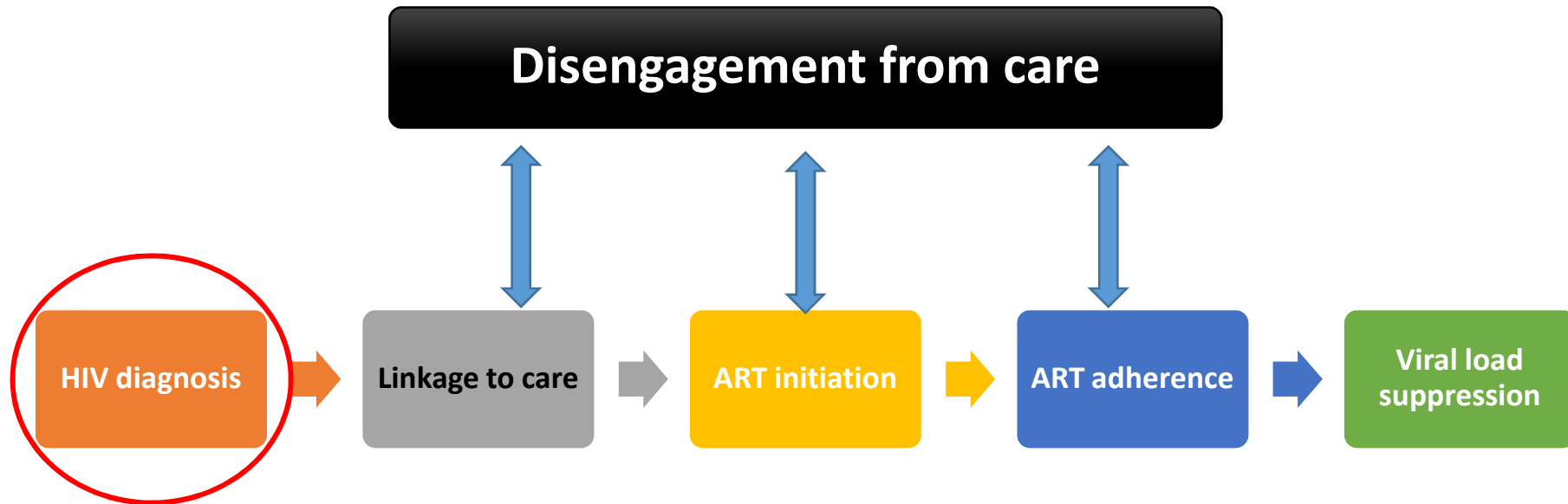


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# HIV care cascade



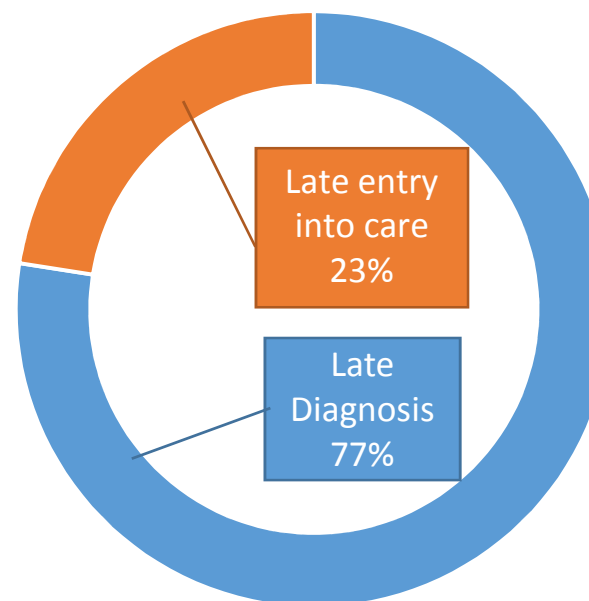
*“Seek, Test, Treat & Retain”*

# Why come so late?

- 111 consecutive patients presenting for the first time with Cd4 count < 200
- Median Cd4 count 32 (IQR 12, 85)

Late entry into care: HIV first positive to date of first presentation - > 6 months

Late Diagnosis: HIV first positive to date of first presentation - < 6 months

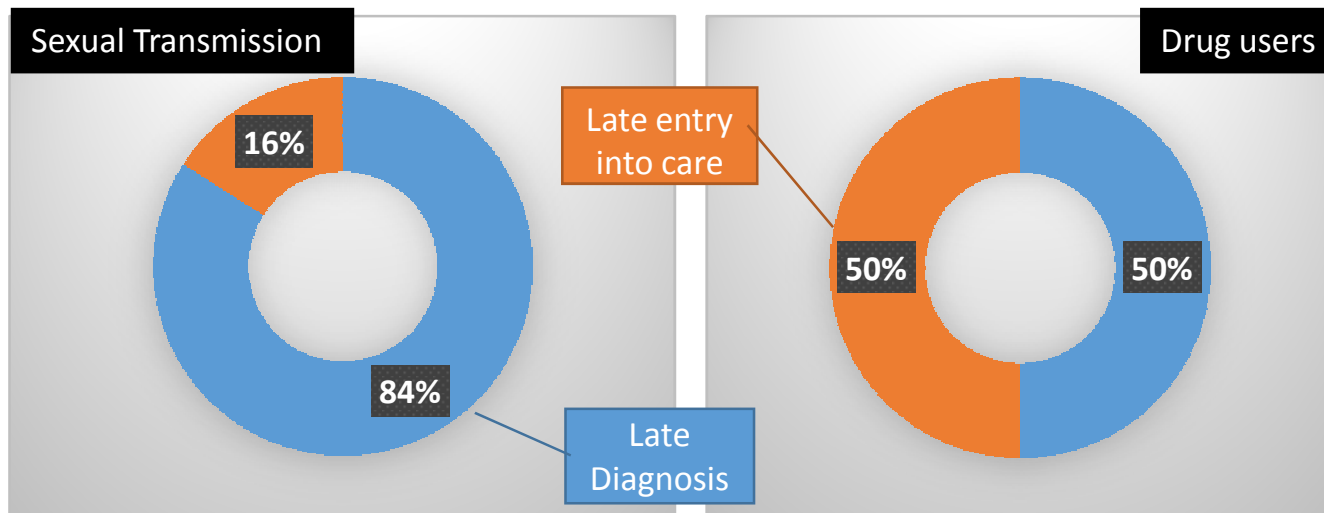


**REASONS FOR LATE PRESENTATION WITH ADVANCED HUMAN IMMUNODEFIENCY VIRUS (HIV): HOSPITAL SUNGAI BULOH EXPERIENCE (Late Study)**

Abdullah Hashim SH, Kumar S. Lee C. Infectious Diseases Unit, Hospital Sungai Buloh

# Why come so late?

| Mode of transmission |     |
|----------------------|-----|
| MSM                  | 44% |
| Heterosexuals        | 24% |
| IDU                  | 17% |



EVERYONE  
HAS A STATUS  
do  
you  
know  
yours



Need to promote more testing among key populations





Doctors have to test more, especially among those at highest risk of getting HIV



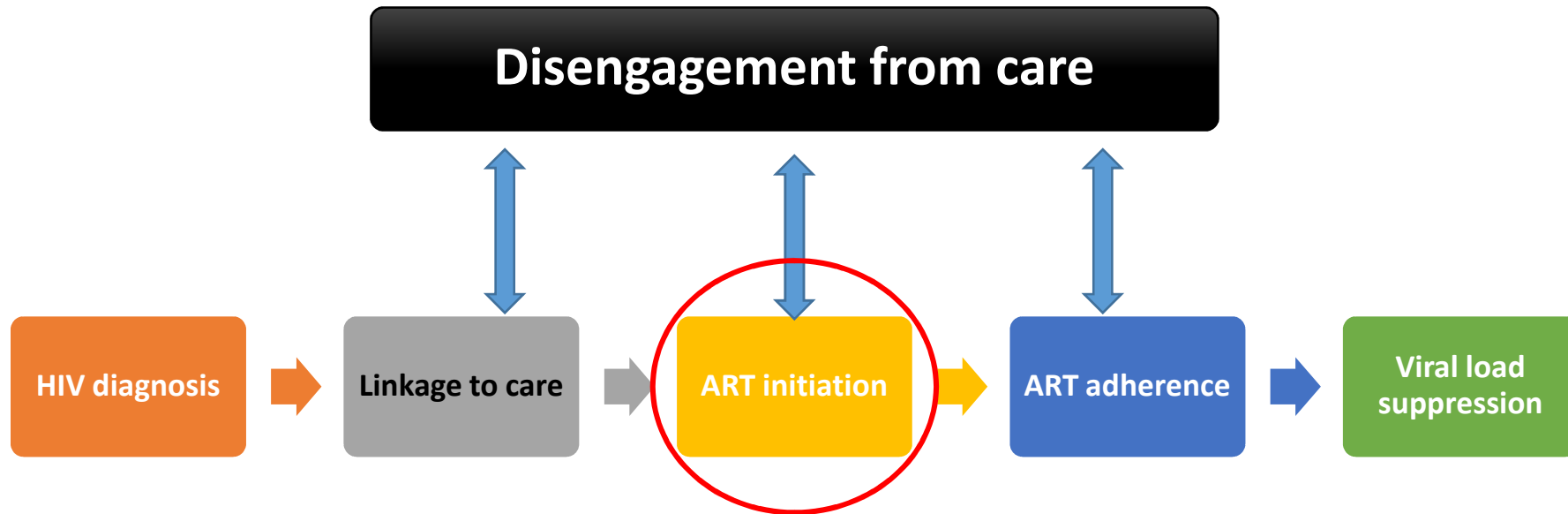
**TEST MORE**

Together we can make it happen.

[ TEST MORE ] + [ TREAT EARLY ] + [ STAY SAFE ] = 

**CLICK HERE FOR TEST LOCATIONS**

# HIV care cascade



*“Seek, Test, Treat & Retain”*

GUIDELINES



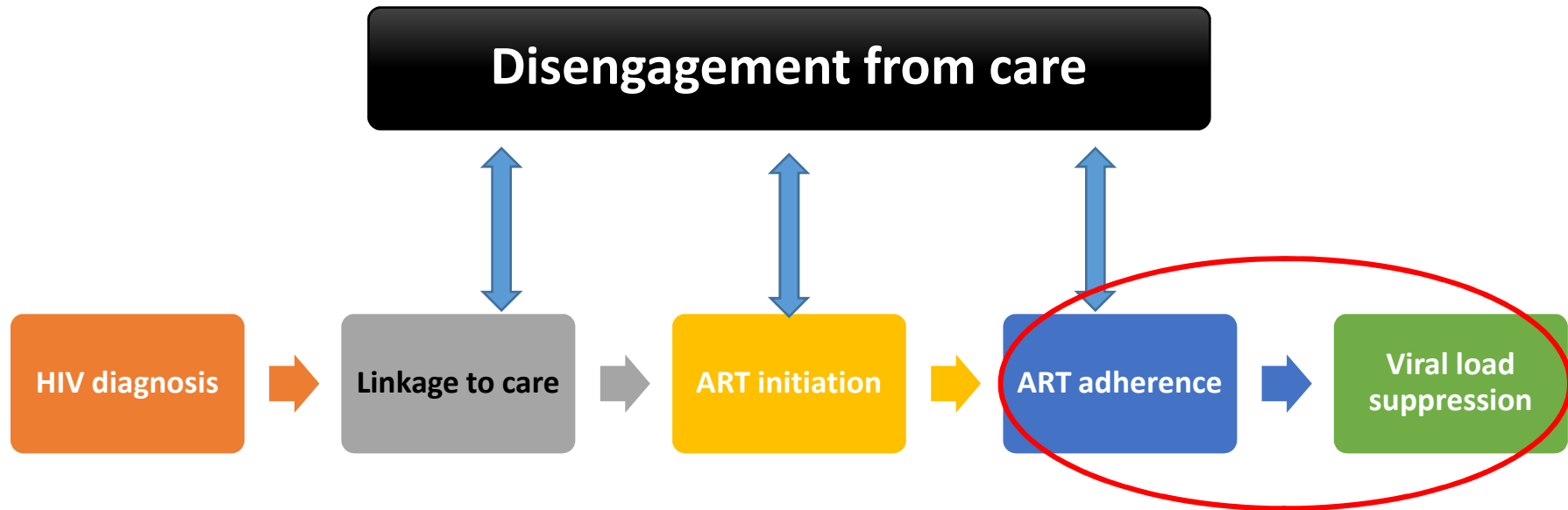
**GUIDELINE ON WHEN  
TO START ANTIRETROVIRAL  
THERAPY AND  
ON PRE-EXPOSURE  
PROPHYLAXIS FOR HIV**

SEPTEMBER 2015

| Recommendation 1: When to start ART among people living with HIV |   |                                |                                   |
|--|---|--------------------------------|-----------------------------------|
| Target population  | Specific recommendation   | Strength of the recommendation | Quality of the evidence           |
| Adults <sup>a</sup><br>(>19 years)                               | ART should be initiated in all adults living with HIV at any CD4 cell count   | <i>Strong</i>                  | <i>Moderate</i><br><b>NEW</b>     |
|  | As a priority, ART should be initiated in all adults with severe or advanced HIV clinical disease (WHO clinical stage 3 or 4) and individuals with CD4 count $\leq 350$ cells/mm <sup>3</sup> | <i>Strong</i>                  | <i>Moderate</i>                   |
| Pregnant and breastfeeding women                                 | ART should be initiated in all pregnant and breastfeeding women living with HIV at any CD4 cell count and continued lifelong  | <i>Strong</i>                  | <i>Moderate</i><br><b>UPDATED</b> |

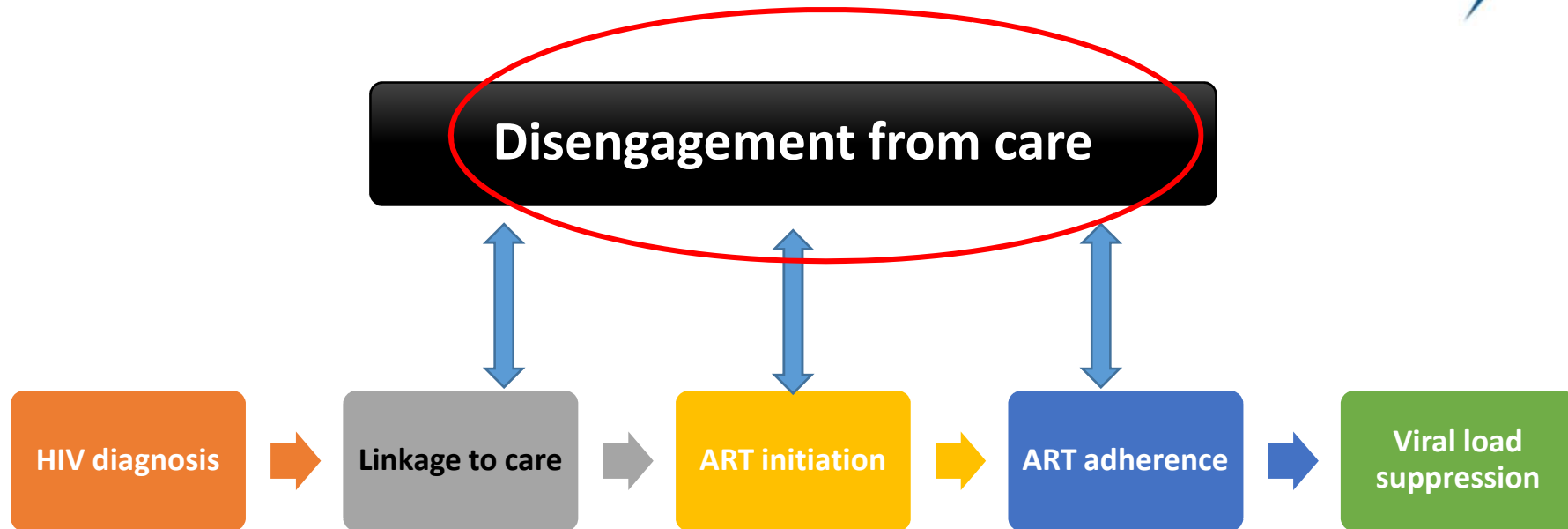


# HIV care cascade



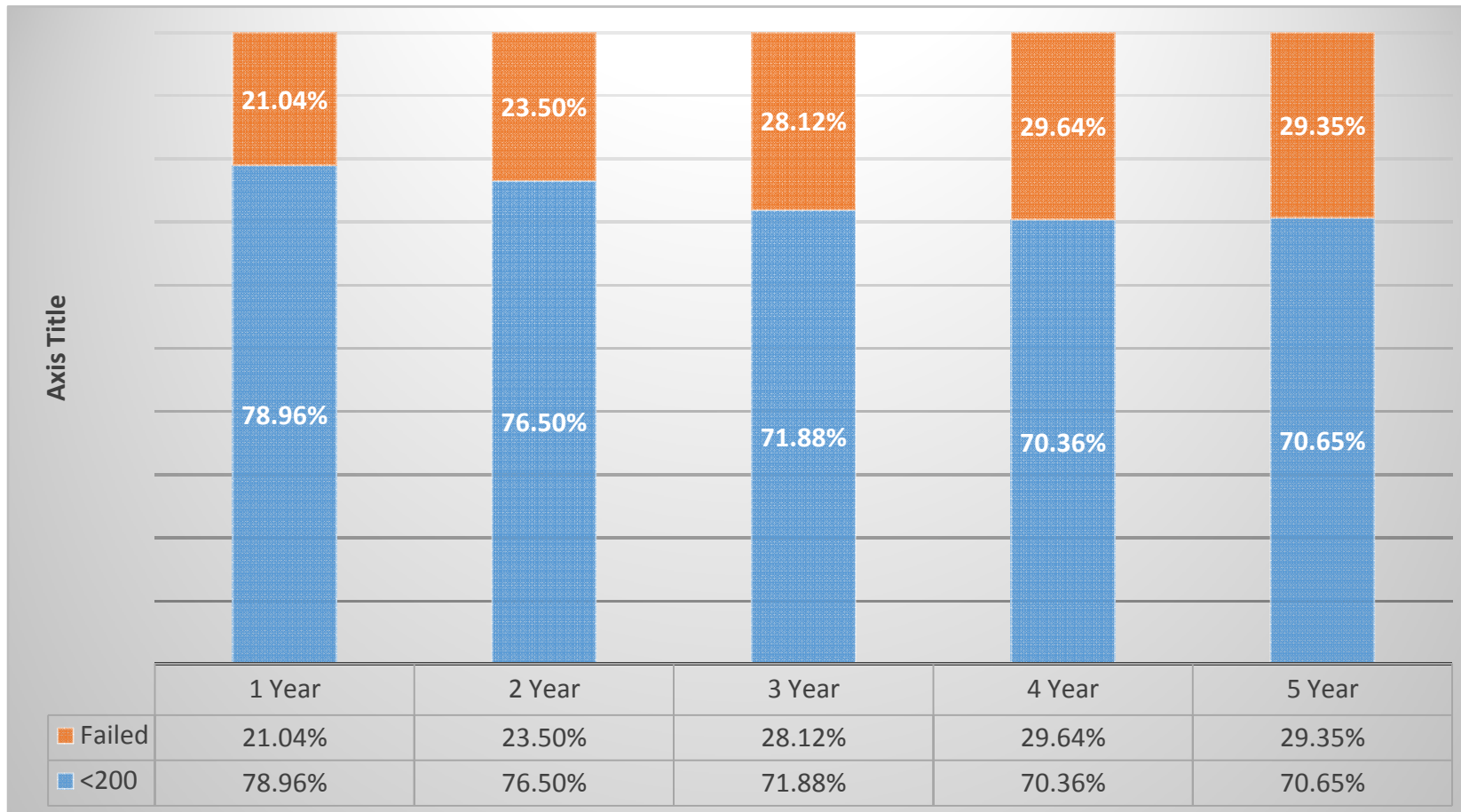
*“Seek, Test, Treat & Retain”*

# HIV care cascade



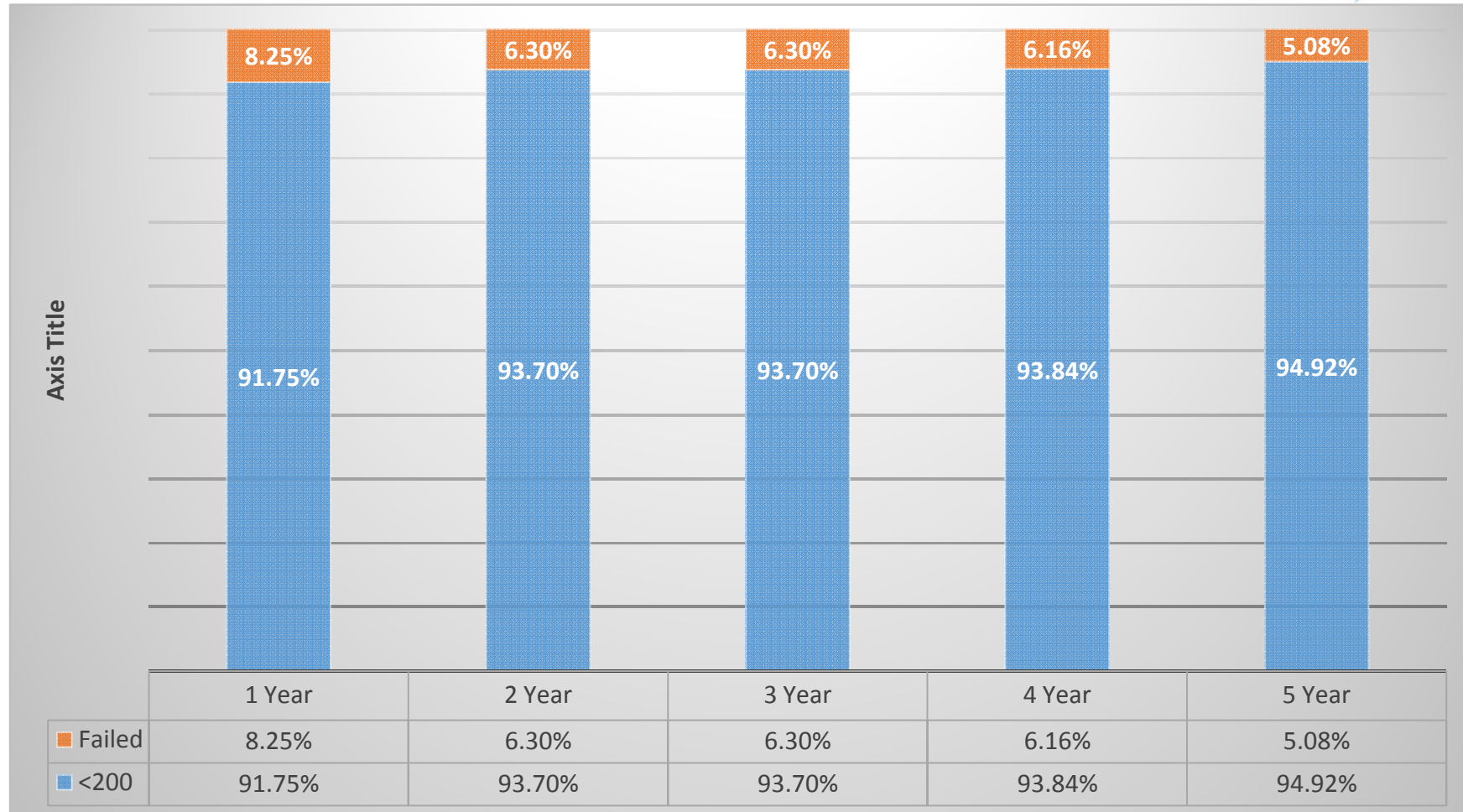
*“Seek, Test, Treat & Retain”*

# Intention to treat analysis (missing = failure)



\*Transfer outs excluded from analysis

# On treatment analysis



\*all missing values excluded from analysis

# Structural barriers

**Structural barriers stem from material conditions of life in resource-limited settings**

| <b>Unmet needs</b>   | <b>Conflicting demands</b> | <b>Prison/incarceration</b> |
|----------------------|----------------------------|-----------------------------|
| Transportation costs | Work responsibilities      |                             |
| No money             | Child care commitments     |                             |
| Too far              | Family accident            |                             |
|                      | Pregnancy, childbirth      |                             |



Treatment as Prevention

Engagement as Prevention



## How to Stay Connected

- Keep all of your scheduled clinic appointments.
- Work as a team with your health care providers.
- Talk openly and honestly with your health care team.
- Ask questions that are important to you.

## Why Is It Important to Keep All of Your Clinic Appointments?

### Your Health Depends on It!

#### At your appointments

- We can check your health and make changes to your treatment plan if needed.
- We can give you the best medical care.
- You can take control of your health.

*In one large study, people with HIV who attended all of their clinic appointments lived longer.*

*Source: Clinical Infectious Diseases, 2007.*

**Remember—it is important to come to all of your clinic appointments whether you feel sick or feel well.**

## Ways to Remember Your Clinic Appointments

- Write all of your appointments in a calendar.
- Put reminders or alerts in your cell phone.
- Put your reminder card in a place where you will see it often.
- Make sure we have your correct telephone number and address.
- Let us know right away if your telephone number or address changes.

If something comes up and you can't keep a clinic appointment, please call us at least 2 days in advance. It is important to reschedule if you miss an appointment.

## Come to All of Your Clinic Appointments

### Take Control of Your Health

Lower your HIV viral load

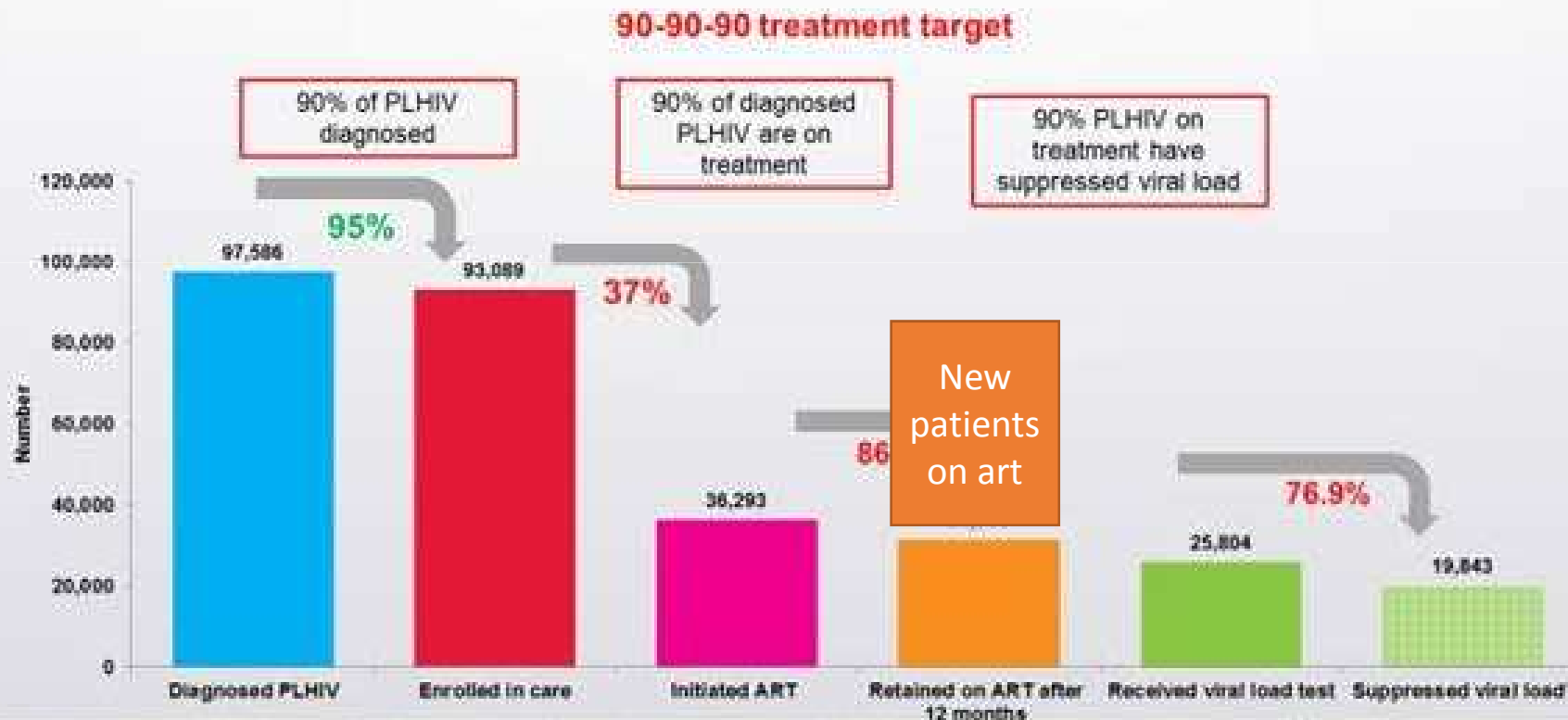
Raise your CD4 count (T cells)

Research shows that keeping your regular clinic appointments can improve your health and help you live longer.



# Treatment cascade - Malaysia 2016

14



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“One size fits all” to “differentiated care”

A Toolkit for Health Facilities

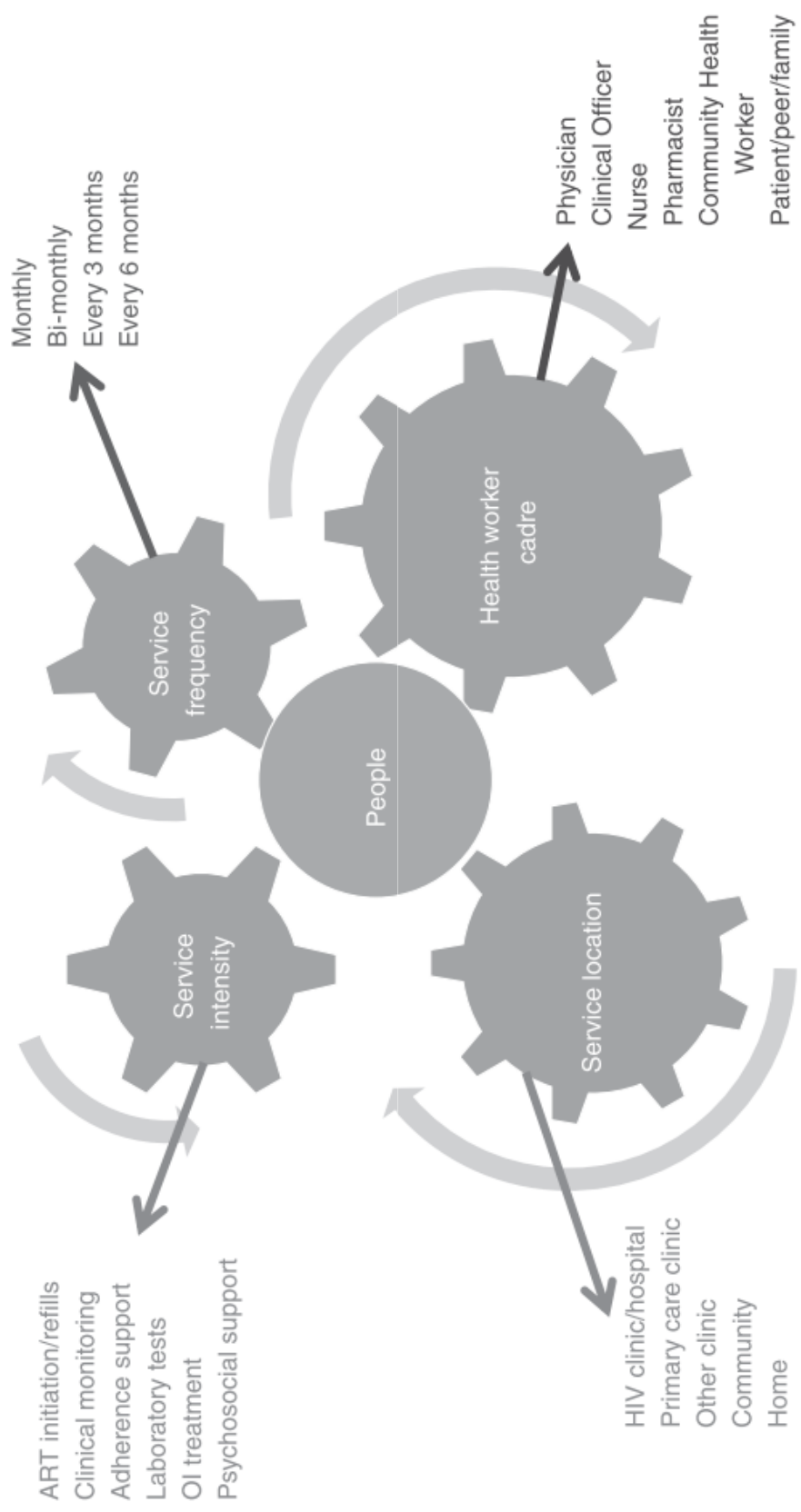
Differentiated Care

For HIV and Tuberculosis

November 2015

Geneva, Switzerland

**The levers of tiered care**



# Task shifting

**Congratulations!**



You are now a  
member of  
**ID Wellness Clinic**

**What is ID Wellness Clinic ?**

ACC is a clinic specially designed for you after you have achieved stability in your HIV treatment.

We want to do more for you and help you to look beyond viral suppression.



**What do we do in ID Wellness Clinic?**

Cardiovascular disease screening & prevention

Optimize sugar & cholesterol level

Cancer screening

Healthy lifestyle promotion

**ACC**

- Your HIV disease is now under control
- Stable HIV patients still face risks of heart, liver, kidney diseases and cancer
- You are chosen to participate in a specialized clinic under trained nurse counselors who will regularly assess you for these conditions besides your HIV

**CONSENT**

- Will be situated in PKKN – away from crowds
- Easier and faster visits
- Specialists on hand to address any medical needs



*“Seek, Test, Treat & Retain”*

**Thank you**



Hospital Sungai Buloh