



TIER-Plus overview and core functionality



 **AIDS 2026**

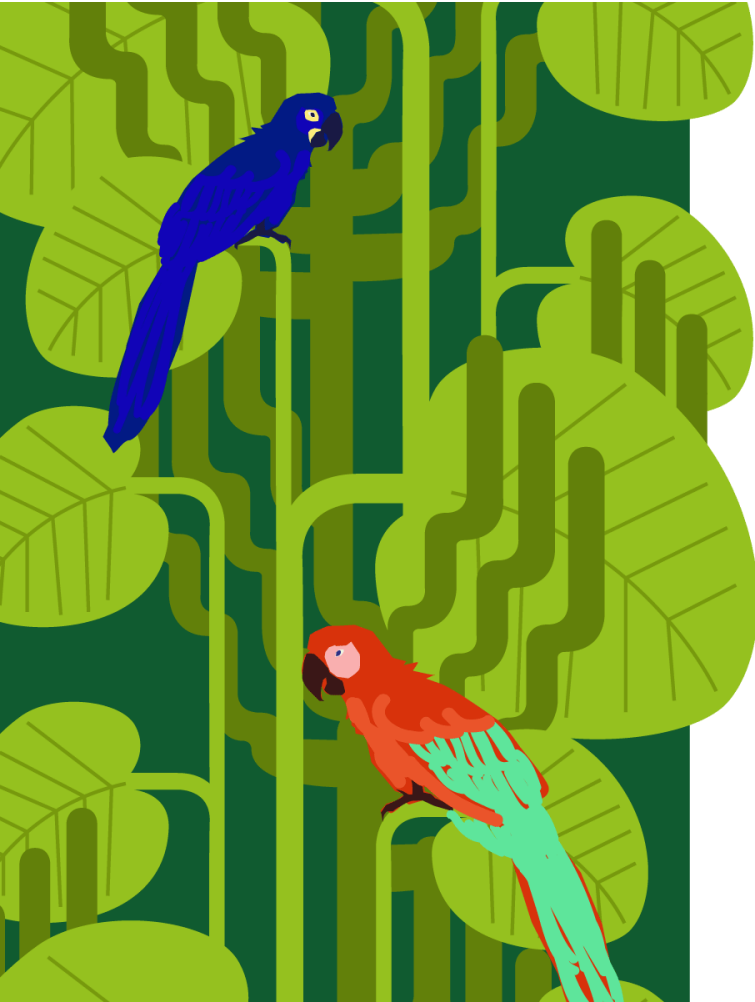
Brooke Nichols, Boston University
Prioritization under pressure: Rethinking HIV service delivery with TIER-Plus

26–31 July • Rio de Janeiro, Brazil

aids2026.org



 **AIDS 2026**



Who is TIER-Plus for?

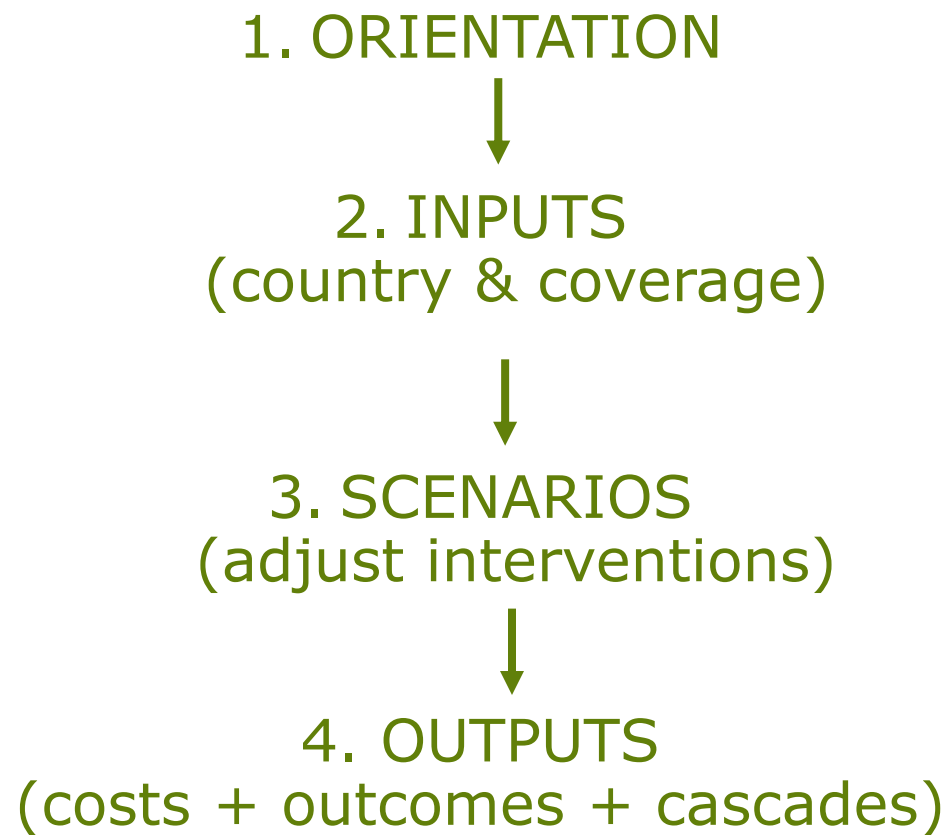
26–31 July • Rio de Janeiro, Brazil

aids2026.org



 **AIDS 2026**

Let's take a look





Select Regional Profile:

Malawi

Epidemic Parameters
(Start of Year)

Total Population:

22,216,120

HIV Prevalence among people
aged 15+ (%):

7.3

New HIV Acquisitions/Year:

11,757

% of PLHIV Diagnosed:

95.2

% Diagnosed on ART:

95

User Guide Baseline Coverage Scenarios Results Comparison Parameters

TIER-Plus — User Guide

A decision-support tool for trade-off analysis in HIV service planning

TIER-Plus Tutorial

IAS - the International AIDS Society

Epidemic Parameters (Start of Year)

Total Population: 21314955

HIV Prevalence (%): 10.7

New Acquisitions/Year: 30400

% of PLHIV Diagnosed: 95.3

% Diagnosed on ART: 98

% on ART Suppressed: 97.5

Annual Deaths/Year: 100

Feedback

Prevention

PtEP (oral)

Baseline: 133,901

Scenario 1: 1624

Scenario 2: 133901

PtEP (Lenacapavir)

Baseline: 1,624

Scenario 1: 274325

Scenario 2: 1624

VMMC

Baseline: 274,325

Scenario 1: 21738994

Scenario 2: 274325

Condom distribution

Baseline: 21,738,994

Scenario 1: 74

Scenario 2: 21738994

Infant HIV prophylaxis to reduce vertical transmission

Scenario 1: 74

Scenario 2: 74

Watch on YouTube

What is TIER-Plus

TIER-Plus is an extension of the original TIER prioritization tool. It aims to enable stakeholders to compare outcome and

Orientation





 **AIDS 2026**

What goes in (inputs 1)

- a. Select the country
- b. Confirm (or edit)
epidemic parameters
(greyed out cannot be modified)

 **IAS TIER-Plus - HIV Interv**

Select Regional Profile: <

Malawi

Epidemic Parameters
(Start of Year)

Total Population:

22216120

HIV Prevalence among people
aged 15+ (%):

7.3

New Acquisitions/Year:

11757

% of PLHIV Diagnosed:

95.2

% Diagnosed on ART:

95

% on ART Suppressed:

94.9



Select Regional Profile:

Malawi

Epidemic Parameters
(Start of Year)

Total Population:

22,216,120

HIV Prevalence among people
aged 15+ (%):

7.3

New HIV Acquisitions/Year:

11,757

% of PLHIV Diagnosed:

95.2

% Diagnosed on ART:

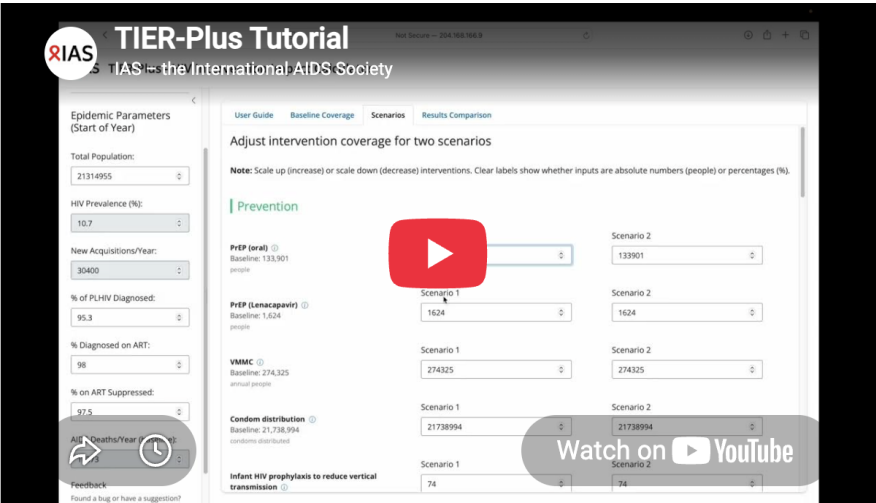
95

[Share feedback](#)
dsd@iasociety.org

User Guide
Baseline Coverage
Scenarios
Results Comparison
Parameters

TIER-Plus — User Guide

A decision-support tool for trade-off analysis in HIV service planning



What is TIER-Plus

TIER-Plus is an extension of the original TIER prioritization tool. It aims to enable stakeholders to compare outcome and





AIDS 2026

What goes in (inputs 2)

c. Baseline interventions (coverage)

- For prevention
- For testing and diagnosis
- For treatment monitoring and quality
- For retention and adherence support
- For advanced HIV disease

Important note!

Default data is provided → Users can customize if better national data are available.

Testing & Diagnosis

Testing: facility-based (general) (tests
pe

3

Prevention

Te: PrEP (oral) (people) ⓘ

pe

3

58089

Te: PrEP (Lenacapavir) (people) ⓘ

pe

1

0

VMMC (annual people) ⓘ

pe

1

47890

Condom distribution (condoms
distributed) ⓘ

139000000

Treatment Monitoring & Quality

Routine VL monitoring (% of people on
ART) ⓘ

82

MM

clie

CD4 testing (all new initiations) (% of
new ART initiations)

47

60

MM

clie

Full AHD package (LAM, CrAg,
fluconazole) (% of AHD-diagnosed new
initiations)

46

MM

clie

80

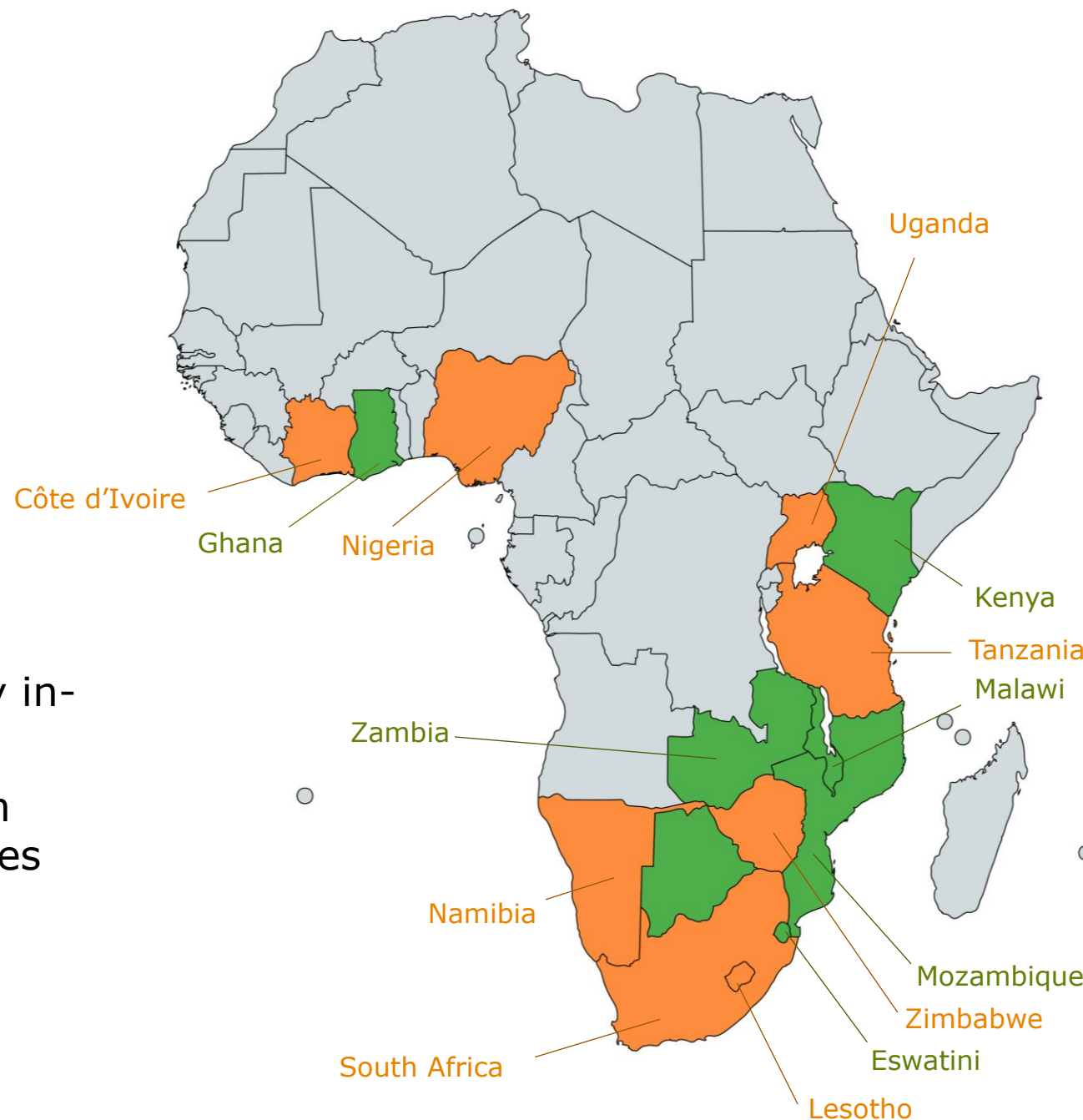
0



AIDS 2026

Countries represented in TIER-Plus

- Baseline data values reviewed and updated by in-country teams
- Baseline data values from publicly available resources and literature





Select Regional Profile:

Malawi

Epidemic Parameters
(Start of Year)

Total Population:

22,216,120

HIV Prevalence among people
aged 15+ (%):

7.3

New HIV Acquisitions/Year:

11,757

% of PLHIV Diagnosed:

95.2

% Diagnosed on ART:

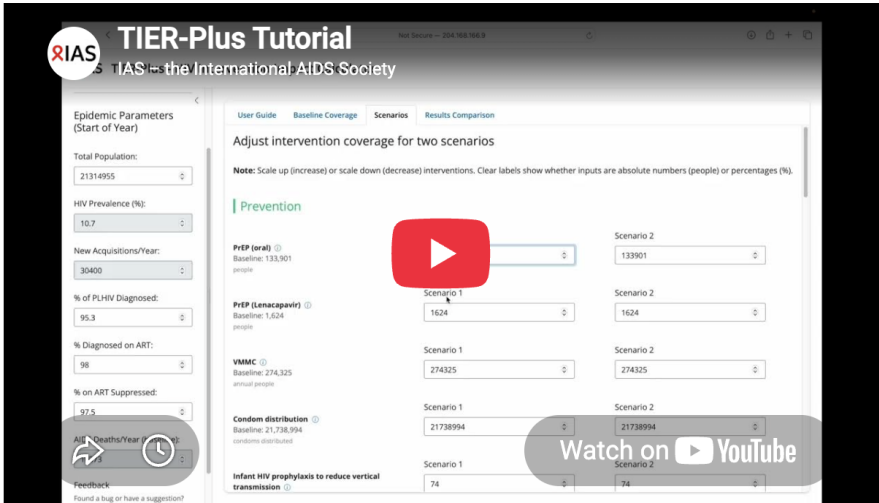
95

[Share feedback](#) dsd@iasociety.org

User Guide Baseline Coverage Scenarios Results Comparison Parameters

TIER-Plus — User Guide

A decision-support tool for trade-off analysis in HIV service planning



What is TIER-Plus

TIER-Plus is an extension of the original TIER prioritization tool. It aims to enable stakeholders to compare outcome and





AIDS 2026

Then it's time to play – or build scenarios

- Adapt the coverage of different interventions (populate different scenarios for comparison)
- Add more interventions. and/or take some away



With this information, more and less of different interventions, TIER-Plus can then compare the impact on costs and outcomes

For example:

- Scenario 1: No self-testing
- Scenario 2: more 6MMD

Testing & Diagnosis

	Scenario 1	Scenario 2
HIVST (Facility-based) ⓘ Baseline: 1,741,863 tests distributed	0	1741863
HIVST (Community-based) ⓘ Baseline: 60,432 tests distributed	0	60432

Treatment Monitoring & Quality

Routine VL monitoring ⓘ Baseline: 82 % of people on ART	Scenario 1 82	Scenario 2 82
MMD: 3-month dispensing ⓘ Baseline: 47 % of stable clients	Scenario 1 47	Scenario 2 0
MMD: 6-month dispensing ⓘ Baseline: 46 % of stable clients	Scenario 1 46	Scenario 2 95
MMD: 12-month dispensing ⓘ Baseline: 0 % of stable clients	Scenario 1 0	Scenario 2 0



Select Regional Profile:

Malawi

Epidemic Parameters
(Start of Year)

Total Population:

22,216,120

HIV Prevalence among people
aged 15+ (%):

7.3

New HIV Acquisitions/Year:

11,757

% of PLHIV Diagnosed:

95.2

% Diagnosed on ART:

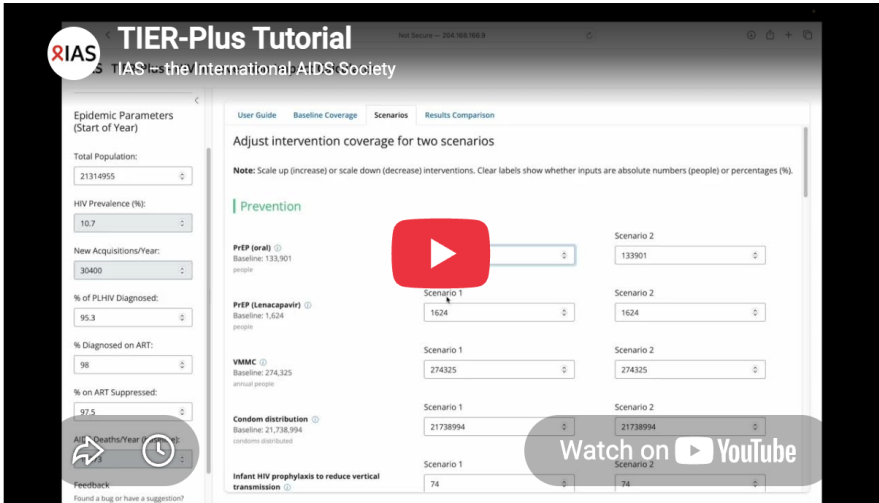
95

[Share feedback](#) dsd@iasociety.org

User Guide Baseline Coverage Scenarios Results Comparison Parameters

TIER-Plus — User Guide

A decision-support tool for trade-off analysis in HIV service planning



What is TIER-Plus

TIER-Plus is an extension of the original TIER prioritization tool. It aims to enable stakeholders to compare outcome and





AIDS 2026

What TIER-Plus produces (outputs) 1/3

→ Two scenarios compared
to the baseline

1-year outputs

a. Progress towards 95-95-95s

Baseline	Scenario 1	Scenario 2
1st 95: % of PLHIV diagnosed 96.4%	1st 95: % of PLHIV diagnosed 96.1% (-0.3pp)	1st 95: % of PLHIV diagnosed 96.4% (+0pp)
2nd 95: % of diagnosed on ART 96.1%	2nd 95: % of diagnosed on ART 96.2% (+0.1pp)	2nd 95: % of diagnosed on ART 96.3% (+0.2pp)
3rd 95: % on ART suppressed 96%	3rd 95: % on ART suppressed 96% (+0pp)	3rd 95: % on ART suppressed 96% (+0pp)

b. Key epidemiological outcomes

Baseline	Scenario 1	Scenario 2
New Adult Acquisitions: 11,757	New Adult Acquisitions: 11,932 (+175)	New Adult Acquisitions: 11,545 (-212)
New Infant Acquisitions: 1,602	New Infant Acquisitions: 1,602 (0)	New Infant Acquisitions: 1,602 (0)
HIV-Related Deaths: 13,453	HIV-Related Deaths: 13,488 (+35)	HIV-Related Deaths: 13,210 (-243)



AIDS 2026

What TIER-Plus produces (outputs) 2/3

c. Health outcomes

Health Outcomes (relative to baseline)

Scenario 1	Scenario 2
Change in ART Initiations: -2,418 (-4.1%)	Change in ART Initiations: -2,382 (-4.0%)
Change in Acquisitions: +175 (+1.5%)	Change in Acquisitions: -203 (-1.7%)
Change in Deaths: +35 (+0.3%)	Change in Deaths: -233 (-1.7%)
Change in Suppressed: -2,092 (-0.2%)	Change in Suppressed: +2,425 (+0.3%)

d. Cost analysis

Cost Analysis

Baseline	Scenario 1	Scenario 2
Intervention \$51,016,231 Costs:	Intervention \$46,654,936 Costs: (-\$4,361,295)	Intervention \$50,919,488 Costs: (-\$96,743)
ART Provision: \$83,006,600	ART Provision: \$82,769,682 (-\$236,918)	ART Provision: \$80,077,079 (-\$2,929,521)
Total Program Cost: \$134,022,831	Total Program Cost: \$129,424,618 (-\$4,598,213)	Total Program Cost: \$130,996,567 (-\$3,026,264)



 **AIDS 2026**

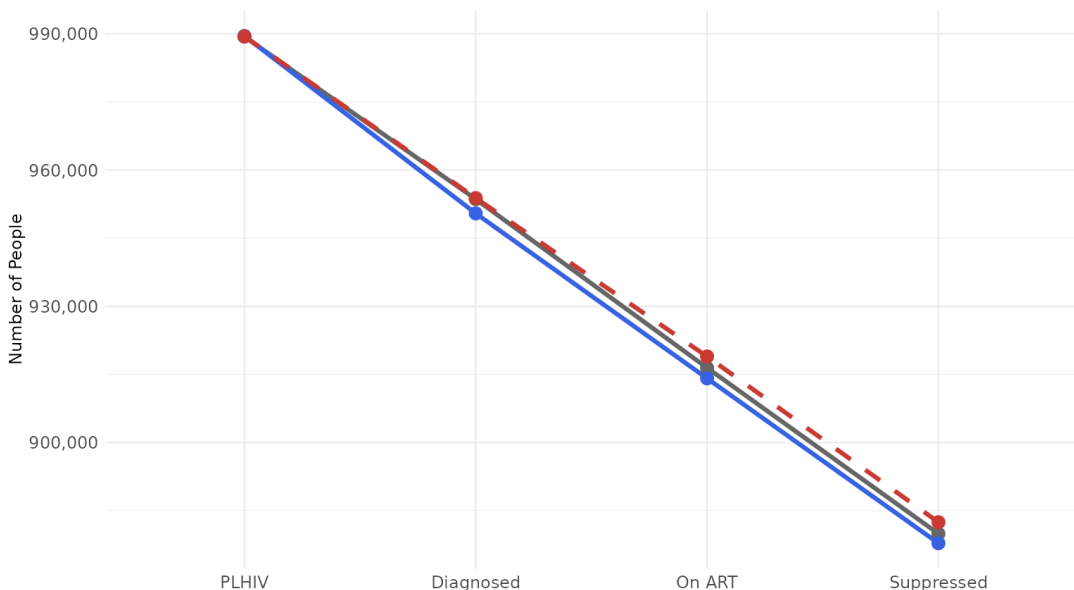
What TIER-Plus produces (outputs) 3/3

e. Impact on HIV care cascade

HIV Care Cascade: End of Year Outcomes

Gray = Baseline | Blue solid = Scenario 1 | Red dashed = Scenario 2

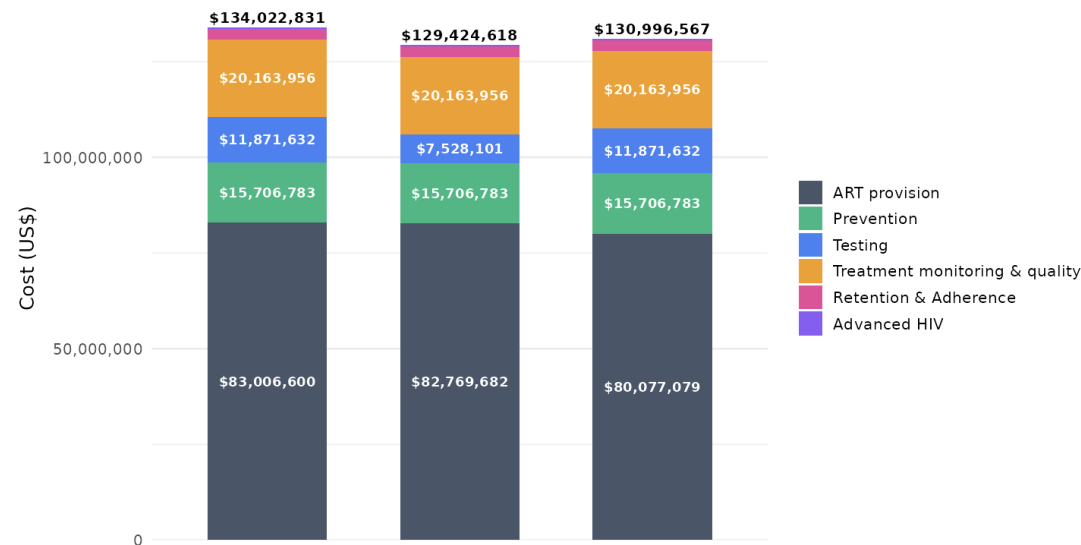
● Baseline ● Scenario 1 ● Scenario 2



f. Cost breakdown

Cost by Programme Area (US\$)

Stacked cost breakdown: Baseline vs Scenarios





Select Regional Profile:

Malawi

Epidemic Parameters
(Start of Year)

Total Population:

22,216,120

HIV Prevalence among people
aged 15+ (%):

7.3

New HIV Acquisitions/Year:

11,757

% of PLHIV Diagnosed:

95.2

% Diagnosed on ART:

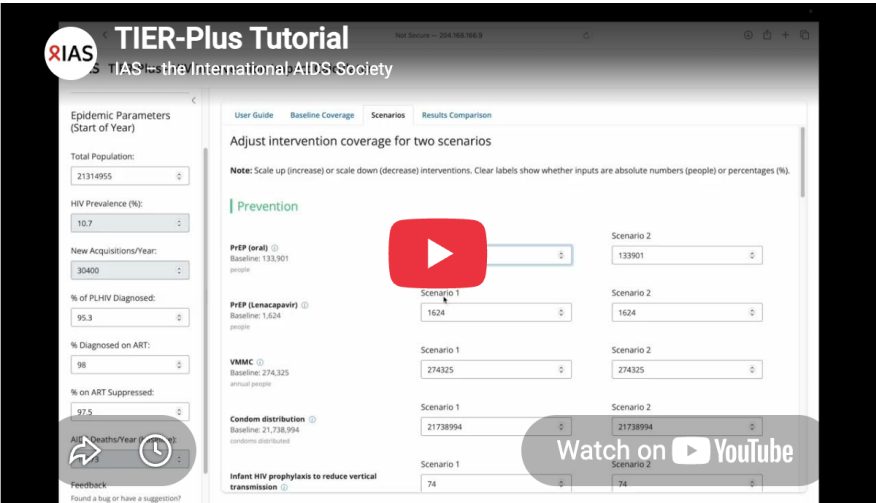
95

[Share feedback](#) dsd@iasociety.org

User Guide Baseline Coverage Scenarios Results Comparison Parameters

TIER-Plus — User Guide

A decision-support tool for trade-off analysis in HIV service planning



What is TIER-Plus

TIER-Plus is an extension of the original TIER prioritization tool. It aims to enable stakeholders to compare outcome and





 **AIDS 2026**

What if you want to adjust the assumptions?

[User Guide](#)[Baseline Coverage](#)[Scenarios](#)[Results Comparison](#)[Parameters](#)

Effectiveness and unit cost assumptions

Note: Values below represent those used as the defaults for the modelling results, informed by literature or country data where available. If these differ from your expectations, you can override them for this country session. Selecting a different country will reset these values to the defaults. This can also be done using the reset button at the bottom of the tab.

Prevention

Oral PrEP, cost of a full 12 months per person

FSW [i](#)

84.82

MSM [i](#)

81.22

AGYW [i](#)

83.53

General population [i](#)

83.21

Lenacapavir, per person initiating

FSW [i](#)

39.00

MSM [i](#)

36.68

AGYW [i](#)

39.00

General population [i](#)

39.00

Other prevention, per unit delivered

VMMC [i](#)

90.00

Condoms (per condom) [i](#)

0.06

Infant prophylaxis [i](#)

12.86



 **AIDS 2026**

What TIER-Plus can do

-  Support decision making conversations at a national level
-  Look at the impact across the cascade of multiple interventions
-  Give an understanding of relative impact of different interventions on both outcomes and cost

What TIER-Plus cannot do

-  Provide exact cost estimates for budgeting
-  Give **long-term** estimates on epidemic impact
-  Replace intervention-specific planning (use DMPPT, PrEP-it, etc.)

 **INTEGRATION**



 **AIDS** 2026

The piloting phase

The piloting phase has resulted in several meaningful changes:

Feedback	Completed
PrEP targeting by sub-population	✓
Updated costs	✓
Output including cost breakdown by category of costs	✓
Inclusion of 6-monthly clinical visits vs 12- monthly clinical visits	✓
Model display improvements	✓
Updated costs	✓
Users able to update parameters	✓
Adding additional countries	~
PrEP targeting to pregnant and breastfeeding women	~
Further results functionality	~
Changes to VL algorithm	~



 **AIDS 2026**

TIER-plus is a living tool

We need and want your feedback to make TIER-plus as useful as possible!

What else would you like to see?

Please explore and provide feedback!





 **AIDS 2026**

Thank you!

26–31 July • Rio de Janeiro, Brazil

aids2026.org