

MALARIA ATLAS PROJECT

ANALYTICS FOR A MALARIA-FREE WORLD



SMC Alliance/AMP Annual Meetings 2026

**MAP ITN-CM allocation tool: exploring prevention
and case management under limited resources**

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History of tool

**Current
functionality**
(GC7 reprioritisation
use case)

**Potential future
functionality
and use cases**

History of tool: GC7 reprogramming

- May 2025:
 - Major concern about disruption to GC7 funds for planned ITN campaigns in 2025/2026;
 - Countries potentially facing urgent reprogramming under reduced budgets
- Reprogramming raises many questions about optimal strategies and trade-offs
- One potentially common scenario:
 - Maintain case management everywhere
 - Reduce planned ITN distribution (e.g. subnational withdrawal; demographic targeting, household capping)
- This would raise two immediate operational questions:
 - Where should the ITNs be withdrawn? (maximize savings while minimizing cases?)
 - What would be knock-on effect on ACT/RDT commodity needs?
- Partners asked MAP to develop a simple tool to help explore these trade-offs
 - Brought together two pre-existing models:
 - ITN coverage model: predicts coverage trajectory given different distribution scenarios
 - Geospatial prevalence/incidence model: estimates impact of changing coverage on case burden

History of tool

**Current
functionality**
(GC7 reprioritisation
use case)

**Potential future
functionality
and use cases**

We have developed a simple tool which allows users to

- Configure ITN distribution strategies, starting from current planned distributions.
- Quantify the change in ITN volumes required and compare to available/feasible volume.
- Gain insight into plausible change in case management commodity need, relative to current plans.
- Work with MAP to update/refine input data and simulated distribution strategies.

The tool is not a case management quantification tool, nor a forecast.

Given scenarios of ITN volumes, we produce estimated change in malaria cases through a two-step modelling process:

- We generate scenarios of ITN coverage (use) given burn-in distribution volumes, estimated ITN attrition rates, and the scenario volumes
- We estimate impact on malaria cases via MAP *PfPR* and clinical incidence models, given these ITN coverage scenarios.

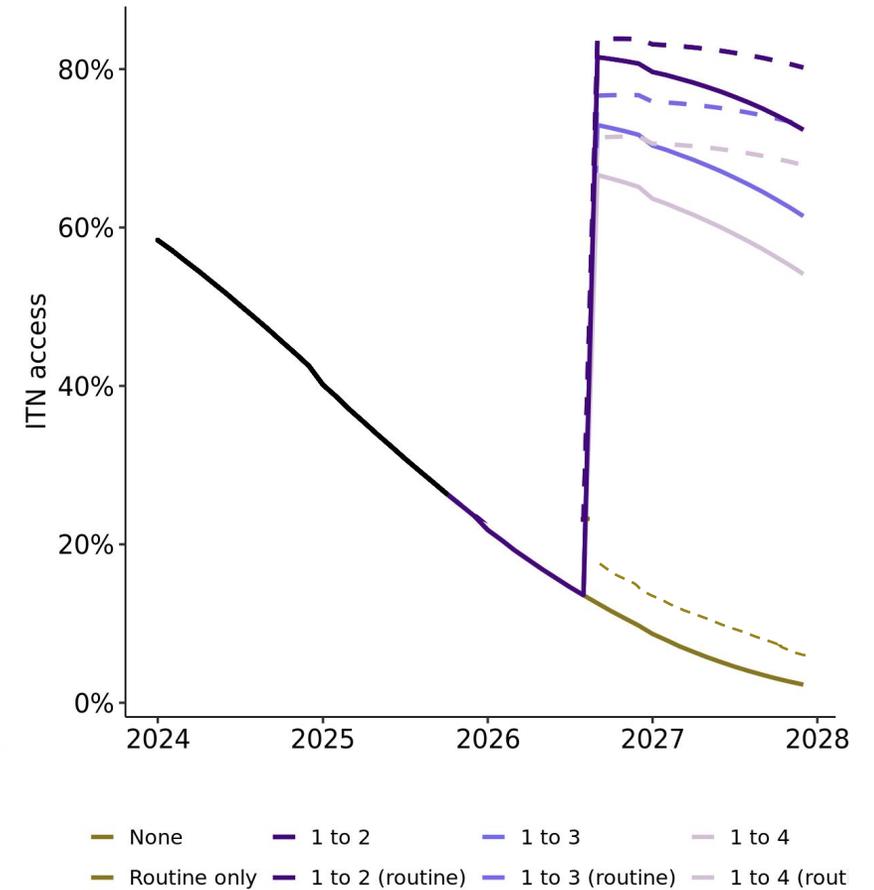
Estimated change in case management need is assumed to **relatively** track change in estimated community-level burden – so e.g. 20% more cases overall means a 20% increase in cases attending health facilities.

After burning in financed ITN distributions to Q2 2025, we simulated a range of possible scenarios of coverage to December 2027 for each Admin2.

Different campaign strategies were simulated according to the table below. In addition to these, routine distribution was simulated.

Number of ITNs by household size

ITN Distribution ratio	1 person	2 person	3 person	4 person	5 person	6 person	7 person
1:2	1	1	2	2	3	3	4
1:3	1	1	1	2	2	2	3
1:4	1	1	1	1	2	2	2



GC7 ITN reprogramming tool

ITN Reprioritisation Explorer GC7 (2026) Liberia

Step 1: Define planned commodity need (before reprioritisation)

Define ITN volume before reprioritisation

Needs met: 3.3 million ITN volume needed

Define RDT/ACT quantification (for 2026) before reprioritisation

RDTs per year: 0 ACT courses per year: 0

Step 2: Define ITN volume available for reprioritisation

0 ITNs available for 2026

Step 3: Configure reprioritised ITN strategy

Begin reprioritised ITN strategy from template? 3.3 million ITNs required for reprogramming strategy

Planned subnational ITN distribution before reprioritisation (click to edit)

Step 4: Review expected impact of reprioritisation

ITN volume required after reprioritisation: 0 ITNs available, 3.3 million ITNs required, -3.3 million ITNs remaining (-0%)

RDTs demand: 0.0% 2026, 0.0% 2027

ACT demand: 0.0% 2026, 0.0% 2027

Select layer: Impact on ITN volumes

Change in ITN volumes legend:

- > 50%
- 40% to 50%
- 30% to 40%
- 20% to 30%
- 10% to 20%
- > 0% to 10%
- 0%
- 10% to < 0%
- 20% to -10%
- 30% to -20%
- 40% to -30%
- 50% to -40%
- < -50%

Map details: Name: Saclepea, State: Nimba, Receptive P/PR: 0.4, Impact on malaria cases: +0.0%, Impact on ITN volumes: +0.0%, Impact on ACT courses: +0.0%, Impact on RDTs: +0.0%

GC7 ITN reprogramming tool

Step 1: Define planned commodity need (before reprioritisation)

Define ITN volume before reprioritisation

Needs met Financed Custom

3.3 million
ITN volume needed

Define RDT/ACT quantification (for 2026) before reprioritisation

RDTs per year: **0**
ACT courses per year: **0**

Step 2: Define ITN volume available for reprioritisation

ITNs available for 2026: **0**

Step 3: Define ITN distribution strategy

Planned subnational ITN distribution before reprioritisation (click to edit)

Step 4: Review expected impact of reprioritisation

ITN volume required after reprioritisation

Required: **0**
ITNs available: **3.3 million**
ITNs required: **-3.3 million**
ITNs remaining: **-0%**

RDTs demand: **0.0%** 2026 **0.0%** 2026

ACT demand: **0.0%** 2026 **0.0%** 2026

Select layer: Impact on ITN volumes

Change in ITN volumes

Name: Saclepea
State: Nimba
Receptive P/PR: 0.4
Impact on malaria cases: **+0.0%**
Impact on ITN volumes: **+0.0%**
Impact on ACT courses: **+0.0%**
Impact on RDTs: **+0.0%**

First, configure 'status quo' scenario for 2026:

- Planned ITN volume to distribute
- Planned subnational ITN distribution strategy
- Planned ACT/RDT quantification

GC7 ITN reprogramming tool

The screenshot displays the 'ITN Reprioritisation Explorer GC7 (2026)' web application. The interface is divided into four main steps:

- Step 1: Define planned commodity need (before reprioritisation)**
 - Define ITN volume before reprioritisation:** Shows 'Needs met' at 3.3 million ITN volume needed. A bar chart compares 'Routine' (purple) and 'Campaign' (blue) needs. A yellow callout box with an arrow points to this value, stating: "National volume to be distributed in 2026".
 - Planned subnational ITN distribution before reprioritisation:** A map of Liberia with a legend for Campaign (No/Yes) and Routine (No/Yes).
- Step 3: Configure reprioritised ITN strategy**
 - Begin reprioritised ITN strategy from template?:** Shows 'Planned strategy' at 3.3 million ITNs required for reprogramming strategy.
 - Refine reprioritised subnational ITN distribution:** A map showing the change in ITN volumes across subnational regions.
- Step 4: Review expected impact of reprioritisation**
 - ITN volume required after reprioritisation:** Shows 0 ITNs available, 3.3 million ITNs required, and -3.3 million ITNs remaining (-0%).
 - RDTs demand:** 0.0% for 2026.
 - ACT demand:** 0.0% for 2026.
 - Change in ITN volumes:** A legend for the map showing percentage changes from > 50% to < -50%.
 - Select layer:** 'Impact on ITN volumes' is selected.
 - Region details:** Name: Timbo, State: River Cess, Receptive PPR: 0.5, Impact on malaria cases: +0.0%, Impact on ITN volumes: +0.0%, Impact on ACT coverage: +0.0%.

GC7 ITN reprogramming tool

Step 1: Define planned commodity need (before reprioritisation)

Define ITN volume before reprioritisation

Needs met Financed Custom

3.3 million
ITN volume needed

Define RDT/ACT quantification (for 2026) before reprioritisation

1.5 million RDTs per year **700 thousand** ACT courses per year

Step 2: Define ITN volume

RDT/ACT status quo is user input

Step 3: Configure reprioritised ITN strategy

Begin reprioritised ITN strategy from template?

Planned strategy Stratified by risk Descending risk

3.3 million ITNs required for reprogramming strategy

Step 4: Review expected impact of reprioritisation

ITN volume required after reprioritisation

Required: 0 ITNs available
3.3 million ITNs required
-3.3 million ITNs remaining (-0%)

RDTs demand: 0.0% 2026 0.0% 2026

ACT demand: 0.0% 2026 0.0% 2026

Change in ITN volumes

- > 50%
- 40% to 50%
- 30% to 40%
- 20% to 30%
- 10% to 20%
- > 0% to 10%
- 0%
- 10% to < 0%
- 20% to -10%
- 30% to -20%
- 40% to -30%
- 50% to -40%
- < -50%

Name: Timbo
State: River Cess
Receptive PPR: 0.5
Impact on malaria cases: +0.0%
Impact on ITN volumes: +0.0%
Impact on ACT courses: +0.0%

GC7 ITN reprogramming tool

ITN Reprioritisation Explorer GC7 (2026) Liberia

Step 1: Define planned commodity need (before reprioritisation)

Define ITN volume before reprioritisation

Needs met: **3.3 million** ITN volume needed

Define RDT/ACT quantification (for 2026) before reprioritisation

RDTs per year: **1.5 million** ACT courses per year: **700 thousand**

Step 2: Define ITN volume available for reprioritisation

0 ITNs available for 2026

Step 3: Configure reprioritised ITN strategy

Begin reprioritised ITN strategy from template?

Planned strategy: **3.3 million** ITNs required for reprogramming strategy

Step 4: Review expected impact of reprioritisation

ITN volume required after reprioritisation: **0** ITNs available, **3.3 million** ITNs required, **-3.3 million** ITNs remaining (-0%)

RDTs demand: **0.0%** 2026, **0.0%** 2027

ACT demand: **0.0%** 2026, **0.0%** 2027

Select layer: Impact on ITN volumes

Change in ITN volumes legend:

- 50%
- 0% to 50%
- 0% to 40%
- 0% to 30%
- 0% to 20%
- > 0% to 10%
- 0%
- 10% to < 0%
- 20% to -10%
- 30% to -20%
- 40% to -30%
- 50% to -40%
- < -50%

Subnational plans extracted from GC7 applications/NSPs/MOPs

GC7 ITN reprogramming tool

ITN Reprioritisation Explorer GC7 (2026) | Liberia

Step 1: Define planned commodity need (before reprioritisation)

- Define ITN volume before reprioritisation: 3.2 million ITN volume needed
- Define RDT/ACT quantification (for 2026) before reprioritisation: 1.5 million RDTs per year, 700 thousand ACT courses per year

Step 2: Define ITN volume available for reprioritisation

- 0 ITNs available for 2026

Step 3: Configure reprogrammed ITN strategy

- 3.2 million ITNs required for reprogramming strategy

Step 4: Review expected impact of reprioritisation

- ITN volume required after reprioritisation: 0 ITNs available, 3.2 million ITNs required, -3.2 million ITNs remaining (-0%)
- RDTs demand: 0.0% 2026, 0.0% 2027
- ACT demand: 0.0% 2026, 0.0% 2027

Map/table is editable.

GC7 ITN reprogramming tool

The screenshot displays the 'ITN Reprioritisation Explorer GC7 (2026)' web application. The interface is divided into four main steps:

- Step 1: Define planned commodity need (before reprioritisation)**
 - Define ITN volume before reprioritisation: 3.2 million ITN volume needed. Includes a bar chart and a legend for Routine (purple) and Campaign (pink).
 - Define RDT/ACT quantification (for 2026) before reprioritisation: 1.5 million RDTs per year and 700 thousand ACT courses per year.
- Step 2: Define ITN volume available for reprioritisation**
 - 0 ITNs available for 2026.
- Step 3: Configure reprioritised ITN strategy**
 - Begin reprioritised ITN strategy from template? Planned strategy (selected), Stratified by risk, Descending risk.
 - 3.2 million ITNs required for reprogramming strategy.
- Step 4: Review expected impact of reprioritisation**
 - Planned subnational ITN distribution before reprioritisation (click to edit): A map of Liberia with a legend for Campaign (No/Yes) and Routine (No/Yes). A popup for 'Bong - Jorquelleh' shows 'Routine' as 'No' and 'Campaign (Q2 2026)' as 'Yes'.
 - Planned subnational ITN distribution after reprioritisation (click to edit): A map showing percentage changes. A legend for Campaign (No/Yes) and Routine (No/Yes) is provided. A popup for 'Bong - Jorquelleh' shows 'Routine' as 'No' and 'Campaign (Q2 2026)' as 'Yes'.

The interface also features a top navigation bar with 'Liberia' selected, and utility buttons for Undo, Redo, Download, Save/Share, and Contact us. Language options for English and Français are also visible.

with details on campaign timing

GC7 ITN reprogramming tool

Step 1: Define planned commodity need (before reprioritisation)

Define ITN volume before reprioritisation: 3.3 million ITN volume needed

Define RDT/ACT quantification (for 2026) before reprioritisation: 1.5 million RDTs per year, 700 thousand ACT courses per year

Step 2: Define ITN volume available for reprioritisation

2.3 million ITNs available for 2026

Step 4: Review expected impact of reprioritisation

ITN volume required after reprioritisation: 2.3 million ITNs available, 3.3 million ITNs required, -928 thousand ITNs remaining (-40%)

RDTs demand: 0.0% 2026, 0.0% 2027

ACT demand: 0.0% 2026, 0.0% 2027

ITN volume required for reprogramming strategy: 3.3 million

Your strategy requires 39.6% more ITNs than are available

Change in ITN volumes: > 50%, 40% to 50%, 30% to 40%, 20% to 30%, 10% to 20%, > 0% to 10%, 0%, -10% to < 0%, -20% to -10%, -30% to -20%, -40% to -30%, -50% to -40%

GC7 ITN reprogramming tool

The screenshot shows the 'ITN Reprioritisation Explorer GC7 (2026)' web application. The interface is divided into four main steps:

- Step 1: Define planned commodity need (before reprioritisation)**
 - Define ITN volume before reprioritisation: 3.3 million (ITN volume needed). Includes a bar chart showing 'Needs met', 'Financed', and 'Custom' categories, with 'Custom' selected.
 - Define RDT/ACT quantification (for 2026) before reprioritisation: 1.5 million RDTs per year and 700 thousand ACT courses per year.
- Step 2: Define ITN volume available for reprioritisation**
 - Slider set to 2.3 million ITNs available for 2026.
- Step 3: Configure reprioritised ITN strategy**
 - Begin reprioritised ITN strategy from template? 'Planned strategy' is selected.
 - 3.3 million ITNs required for reprogramming strategy.
 - Warning: 'Your strategy requires 39.6% more ITNs than are available'.
- Step 4: Review expected impact of reprioritisation**
 - ITN volume required after reprioritisation: 2.3 million (ITNs available), 3.3 million (ITNs required), -928 thousand (ITNs remaining, -40%).
 - RDTs demand: 0.0% (2026), 0.0% (2027).
 - ACT demand: 0.0% (2026), 0.0% (2027).
 - Map: 'Change in ITN volumes' legend showing ranges from > 50% to -50% to -40%.

Additional features include a map of Liberia, a legend for Campaign (No/Yes) and Routine (Yes), and a timeline chart for ITN volume from Q1 2026 to Q4 2027.

And what implications does this have?

GC7 ITN reprogramming tool

The screenshot shows the 'ITN Reprioritisation Explorer GC7 (2026)' web application. The interface is divided into four main steps:

- Step 1: Define planned commodity need (before reprioritisation)**
 - Define ITN volume before reprioritisation:** Shows 'Needs met', 'Financed', and 'Custom' (selected) options. The 'Custom' option is set to 3.3 million ITN volume needed. A bar chart shows 'Routine' (purple) and 'Campaign' (blue) ITN volumes over time.
 - Define RDT/ACT quantification (for 2026) before reprioritisation:** Shows 'RDTs per year' set to 1.5 million and 'ACT courses per year' set to 700 thousand.
- Step 2: Define ITN volume available for reprioritisation**
 - A slider is set to 2.3 million ITNs available for 2026.
- Step 3: Configure reprioritised ITN strategy**
 - Begin reprioritised ITN strategy from template?** Shows 'Planned strategy' (selected), 'Stratified by risk', and 'Descending risk' options. The 'Planned strategy' option is set to 3.3 million ITNs required for reprogramming strategy. A warning message states: 'Your strategy requires 39.6% more ITNs than are available'.
 - Planned subnational ITN distribution before reprioritisation (click to edit):** A map of Liberia showing subnational ITN distribution. A legend indicates 'Campaign' (No/Yes) and 'Routine' (No/Yes).
 - Refine reprioritised subnational ITN distribution (click to edit):** A map of Liberia showing the refined subnational ITN distribution.
- Step 4: Review expected impact of reprioritisation**
 - ITN volume required after reprioritisation:** Shows 'Required' ITNs as 2.3 million and 'Available' ITNs as 3.3 million. The difference is -928 thousand ITNs remaining, a -40% change.
 - RDTs demand:** Shows 0.0% demand for 2026.
 - ACT demand:** Shows 0.0% demand for 2026.
 - ITN volume over time:** A bar chart showing 'Routine' (purple) and 'Campaign' (blue) ITN volumes from Q1 2026 to Q4 2027.
 - Select layer:** Set to 'Impact on ITN volumes'. A legend shows the change in ITN volumes by subnational region, ranging from > 50% (dark blue) to -50% to -40% (dark red).

Tool responds in real time to user input

GC7 ITN reprogramming tool

ITN Reprioritisation Explorer GC7 (2026)

Define RDT/ACT quantification (for 2026) before reprioritisation

1.5 million RDTs per year	700 thousand ACT courses per year
---------------------------	-----------------------------------

Step 2: Define ITN volume available for reprioritisation

2.3 million ITNs available for 2026

Step 3: Configure reprioritised ITN strategy

Begin reprioritised ITN strategy from template?

Planned strategy: Descending risk

Exclude units with completed GC7 campaign:

Routine distribution? Yes

Mass campaign? (allocation ratio): 1:2

Exclude urban:

2.3 million ITNs required for reprogramming strategy

Your strategy uses 98.5% of the ITNs available

Step 4: Review expected impact of reprioritisation

ITN volume required after reprioritisation: 2.3 million ITNs available, 2.3 million ITNs required, 35 thousand ITNs remaining (1%)	RDTs demand: +2.9% 2026, +1.7% 2027
	ACT demand: +6.2% 2026, +3.6% 2027

ITN volume distribution strategy legend:

- > 50%
- 40% to 50%
- 30% to 40%
- 20% to 30%
- 10% to 20%
- > 0% to 10%
- 0%
- 10% to < 0%
- 20% to -10%
- 30% to -20%
- 40% to -30%
- 50% to -40%
- < -50%

Step 3: Configure reprioritised ITN strategy ⓘ

Begin reprioritised ITN strategy from template? ⓘ

Planned strategy ⓘ

Stratified by risk ⓘ

Descending risk ⓘ

Exclude units with completed GC7 campaign ⓘ



Routine distribution?

No

Yes

Routine distribution? ⓘ

Mass campaign? (allocation ratio) ⓘ

No

Yes

Exclude urban ⓘ



None

1:4

1:3

1:2

Exclude urban ⓘ



2.3 million ITNs required for reprogramming strategy

ⓘ Your strategy uses 98.5% of the ITNs available

GC7 ITN reprogramming tool

The screenshot shows the 'ITN Reprioritisation Explorer GC7 (2026)' interface for Liberia. It is divided into several sections:

- Define RDT/ACT quantification (for 2026) before reprioritisation:** Shows 1.5 million RDTs per year and 700 thousand ACT courses per year.
- Step 2: Define ITN volume available for reprioritisation:** A slider set to 2.3 million ITNs available for 2026.
- Step 3: Configure reprioritised ITN strategy:** Includes options for 'Planned strategy' (Descending risk), 'Exclude units with completed GC7 campaign', 'Routine distribution?' (Yes), 'Mass campaign?' (1:2 allocation ratio), and 'Exclude urban' (No).
- Refine reprioritised subnational ITN distribution:** A map of Liberia with sub-national regions shaded in blue, representing the current distribution.
- Step 4: Review expected impact of reprioritisation:** A summary panel showing:
 - ITN volume required after reprioritisation: 2.3 million ITNs available, 2.3 million ITNs required, 35 thousand ITNs remaining (1%).
 - RDTs demand: +2.9% (2026) and +1.7% (2027).
 - ACT demand: +6.2% (2026) and +3.6% (2027).
 - A bar chart showing ITN volume (Routine and Campaign) from Q1 2026 to Q4 2027.
- Select layer: Impact on ITN volumes:** A legend for a map showing the percentage change in ITN volumes, ranging from > 50% (dark blue) to < -50% (dark red).

Changing ITN volumes distributed, sub-nationally

GC7 ITN reprogramming tool

ITN Reprioritisation Explorer GC7 (2026)

Step 1: Define planned commodity need (before reprioritisation)

Define ITN volume before reprioritisation

Needs met | Financed | Custom

8.3 million
ITN volume needed

Define RDT/ACT quantification (for 2026) before reprioritisation

2 million RDTs per year
1.3 million ACT courses per year

Planned subnational ITN distribution before reprioritisation (click to edit)

+

-

Campaign

- No
- Yes
- Routine
- Yes

Step 2: Define ITN volume available for reprioritisation

6.2 million
ITNs available for 2026

Step 3: Configure reprioritised ITN strategy

Begin reprioritised ITN strategy from template?

Planned strategy | Stratified by risk | Descending risk

8.3 million
ITNs required for reprogramming

⚠ Your strategy requires 32% more ITNs than are available

Alternatively, different strategies can be constructed for different units – either manually or by risk strata

GC7 ITN reprogramming tool

ITN Reprioritisation Explorer GC7 (2026)

Define RDT/ACT quantification (for 2026) before reprioritisation

1.5 million RDTs per year

700 thousand ACT courses per year

Step 2: Define ITN volume available for reprioritisation

2.3 million ITNs available for 2026

Step 3: Configure reprioritised ITN strategy

Begin reprioritised ITN strategy from template?

Planned strategy: Stratified by risk

Urban/Rural	Define risk strata (receptive PfPR)	Routine distribution?	Mass campaign (allocation ratio)
Rural	≥ 50 to ≤ 100	No/Yes	0 : 1:4 : 1:3 : 1:2
Rural	≥ 0 to < 50	No/Yes	0 : 1:4 : 1:3 : 1:2
Urban	≥ 0 to ≤ 100	No/Yes	0 : 1:4 : 1:3 : 1:2

2.3 million ITNs required for reprogramming strategy

Your strategy uses 97.1% of the ITNs available

Step 4: Review expected impact of reprioritisation

ITN volume required after reprioritisation: 2.3 million ITNs available, 2.3 million ITNs required, 69 thousand ITNs remaining (3%)

RDTs demand: +0.4% 2026, +0.3% 2027

ACT demand: +0.8% 2026, +0.6% 2027

Users can select strata-wide distribution strategies based on

- Urban/rural
- Receptive *PfPR*

GC7 ITN reprogramming tool

Begin reprioritised ITN strategy from template? ⓘ

Planned strategy ⓘ **Stratified by risk ⓘ** Descending risk ⓘ

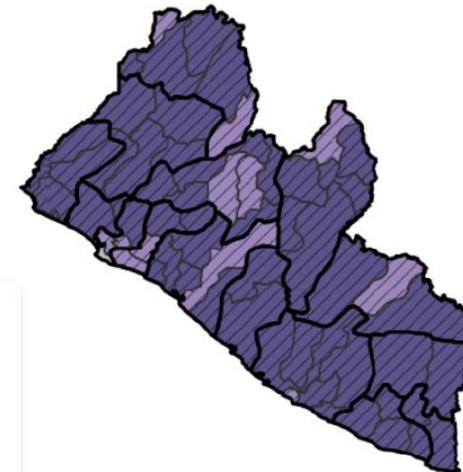
Urban Rural ⓘ	Define risk strata (receptive $PfPR_{2-10}$) ⓘ	Routine distribution? ⓘ	Mass campaign? (allocation ratio) ⓘ	Add strata
Rural	<input type="range" value="50"/> $\geq 50 \leq 100$	No Yes	0 1:4 1:3 1:2	⊖
Rural	<input type="range" value="25"/> $\geq 0 < 50$	No Yes	0 1:4 1:3 1:2	+
Urban	<input type="range" value="100"/> $\geq 0 \leq 100$	No Yes	0 1:4 1:3 1:2	+

2.3 million ITNs required for reprogramming strategy

ⓘ Your strategy uses 97.1% of the ITNs available

Refine reprioritised subnational ITN distribution (click to edit)

+
-



Campaign

- No Campaign
- Allocation ratio 1:4
- Allocation ratio 1:3
- Allocation ratio 1:2

Routine

- Yes

GC7 ITN reprogramming tool

Step 3: Configure reprioritised ITN strategy ⓘ

Begin reprioritised ITN strategy from template? ⓘ

Planned strategy ⓘ **Stratified by risk ⓘ** Descending risk ⓘ

Rural	<input type="range" value="50"/>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	0	1:4	1:3	1:2	+
Urban	<input type="range" value="100"/>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	0	1:4	1:3	1:2	+

Custom ⓘ

[Remove all](#)

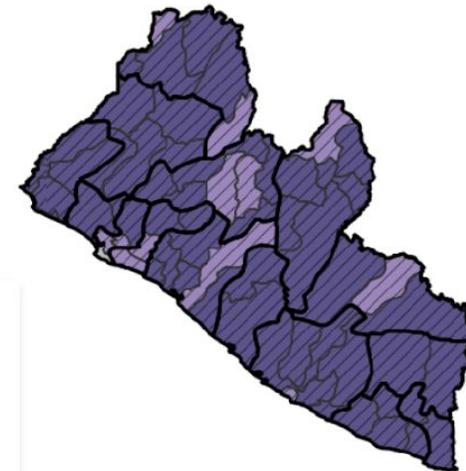
Admin unit	Urban Rural	Receptive PfPR	Routine distribution?		Mass campaign? (allocation ratio)			
Greater Monrovia	Urban	36.16%	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	0	1:4	1:3	1:2

2.3 million ITNs required for reprogramming strategy

ⓘ Your strategy uses 97.1% of the ITNs available

Refine reprioritised subnational ITN distribution (click to edit)

+
-



Campaign

- No Campaign
- Allocation ratio 1:4
- Allocation ratio 1:3
- Allocation ratio 1:2

Routine

- Yes

GC7 ITN reprogramming tool

The screenshot shows the 'ITN Reprioritisation Explorer GC7 (2026)' web application. The interface is divided into several sections:

- Top Panel:** Includes browser tabs, navigation buttons (Undo, Redo, Download, Save/Share, Contact us), and language options (English, Français).
- Left Panel (Configuration):**
 - Define RDT/ACT quantification:** Shows 1.5 million RDTs per year and 700 thousand ACT courses per year.
 - Step 2: Define ITN volume available for reprioritisation:** A slider set to 2.3 million ITNs available for 2026.
 - Step 3: Configure reprioritised ITN strategy:** Includes a 'Begin reprioritised ITN strategy from template?' section with options for 'Planned strategy', 'Stratified by risk', and 'Descending risk'. It also features a 'Custom' section for configuring rural and urban strategies with allocation ratios (e.g., 1:2, 1:3, 1:4).
- Center Panel (Maps):** Two maps of Liberia showing subnational ITN distribution. The top map shows the current state, and the bottom map shows the distribution after reprogramming. A legend for 'Campaign' (No, Yes) and 'Routine' (Yes) is provided for both.
- Right Panel (Impact Review):**
 - Step 4: Review expected impact of reprioritisation:** A summary of expected changes.
 - ITN volume required after reprioritisation:** A bar chart comparing 'Available' (2.3 million) and 'Required' (2.3 million) ITNs, with 69 thousand ITNs remaining (3%).
 - RDTs demand:** Shows a +2.3% increase in 2026 and a +4.9% increase in 2027.
 - ACT demand:** Shows a +5.0% increase in 2026 and a +11% increase in 2027.
 - ITN volume over time:** A bar chart showing ITN volume from Q1 2026 to Q4 2027, distinguishing between Routine and Campaign volumes.
 - Select layer:** A dropdown menu set to 'Impact on ITN volumes'.
 - Change in ITN volumes:** A legend for a map showing percentage changes in ITN volumes, ranging from > 50% (dark blue) to < -50% (dark red).

Summarised change in distributed volumes, subnationally

GC7 ITN reprogramming tool

ITN Reprioritisation Explorer GC7 (2026)

Urban ≥ 0 ≤ 100 No Yes 0 1:4 1:3 1:2 +

Custom Remove all

Admin unit	Urban Rural	Receptive P/PR	Routine distribution?	Mass campaign? (allocation ratio)
Greater Monrovia	Urban	36.16%	No Yes	0 1:4 1:3 1:2

2.3 million ITNs required for reprogramming strategy

Your strategy uses 97.1% of the ITNs available

Subnational ITN reprogramming configuration (click to edit)

State	Admin unit	Urban / Rural	Receptive P/PR	ITN strategy before		ITN strategy after		Expected impact of reprioritisation			
				Routine	Campaign	Routine	Campaign	ITN volume	RDT demand	ACT demand	Malaria cases
Sinoe	Butaw	Rural	43.4%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Dugbe River	Rural	55.8%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Greenville	Urban	21.1%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:3	↓ 24.6%	↑ 0.3%	↑ 0.8%	↑ 0.8%
Sinoe	Jaedae Jaedepo	Rural	60.6%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Juarzon	Rural	58.8%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Kpayan	Rural	59.2%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Pyneston	Rural	56.2%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
River Gee	Gbeapo	Rural	70.1%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%

2.3 million ITNs available
2.3 million ITNs required
69 thousand ITNs remaining

ITN volume

ITN volume

Select layer: Impact on ITN volumes

Change in ITN volumes

- > 50%
- 40% to 50%
- 30% to 40%
- 20% to 30%
- 10% to 20%
- > 0% to 10%
- 0%
- 10% to < 0%
- 20% to -10%
- 30% to -20%
- 40% to -30%
- 50% to -40%
- < -50%

Name: Voinjama
State: Lofa
Receptive P/PR: 0.6
Impact on malaria cases: +0.0%
Impact on ITN volumes: +0.0%
Impact on ACT courses: +0.0%
Impact on RDTs: +0.0%

Each pane in the dashboard has an associated column in the table, again editable individually or by groups. This can be downloaded.

GC7 ITN reprogramming tool

ITN Reprioritisation Explorer GC7 (2026) Liberia

Urban ≥ 0 ≤ 100 No Yes 0 1:4 1:3 1:2 +

Custom Remove all

Admin unit	Urban Rural	Receptive P/PR	Routine distribution?	Mass campaign? (allocation ratio)
Greater Monrovia	Urban	36.16%	No Yes	0 1:4 1:3 1:2

2.3 million ITNs required for reprogramming strategy

Your strategy uses 97.1% of the ITNs available

Step 4: Review expected impact of reprioritisation

ITN volume required after reprioritisation: 2.3 million ITNs available, 2.3 million ITNs required, 69 thousand ITNs remaining (3%)

RDTs demand: +2.3% 2026 +4.9% 2027

ACT demand: +5.0% 2026 +11% 2027

Subnational ITN reprogramming configuration (click to edit)

State	Admin unit	Urban / Rural	Receptive P/PR	ITN strategy before		ITN strategy after		Expected impact of reprioritisation			
				Routine	Campaign	Routine	Campaign	ITN volume	RDT demand	ACT demand	Malaria cases
Sinoe	Butaw	Rural	43.4%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Dugbe River	Rural	55.8%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Greenville	Urban	21.1%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:3	↓ 24.6%	↑ 0.3%	↑ 0.8%	↑ 0.8%
Sinoe	Jaedae Jaedepo	Rural	60.6%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Juarzon	Rural	58.8%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Kpayan	Rural	59.2%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
Sinoe	Pyneston	Rural	56.2%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%
River Gee	Gbeapo	Rural	70.1%	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1:2	0.0%	0.0%	0.0%	0.0%

Impact is summarised in terms of increased need for ACT/RDT, relative to amounts in user defined quantification.

Impact on malaria cases: +0.0%

Impact on ITN volumes: +0.0%

Impact on ACT courses: +0.0%

Impact on RDTs: +0.0%

History of tool

**Current
functionality**
(GC7 reprioritisation
use case)

**Potential future
functionality
and use cases**

Limitations and future utility

This tool was developed for specific use case, but overall user interface and functionality is generic. It combines two core functionalities:

Coverage modelling:

- Scenarios of ITN distribution volumes translated to population coverage scenarios, accounting for:
 - Pre-existing nets in households
 - Effects of household size on net ownership and use
 - Local ITN attrition rates and use given access

- Currently, we do not account for:
 - Costings and distribution channels:
 - Scenarios configured by overall input volumes, not budget envelope
 - But there are distribution budget implications for e.g. routine vs mass campaign channels
 - Age-structured coverage
 - Targeting achieved by routine channels (i.e. we assume routine nets distributed across whole population)

**Clear pathway to extension
in collaboration with partners**

Impact modelling:

- Epidemiological model converts ITN coverage scenarios into disease burden, accounting for variation in:
 - Efficacy of ITNs, including impact of insecticide resistance and next-generation nets
 - Receptive transmission potential in the absence of vector control
 - Context of other intervention coverages

- Currently, we do not account for:
 - Age-structured impact, including differential impact of age-targeted distributions
 - Changing coverage of other vertical interventions, e.g. SMC

**Longer-term R&D required
in collaboration with partners**

Conclusion

The current version tool can be accessed on the MAP website:

<https://itn-scenario-explorer.malariaatlas.org>