

Annual National RAM Conference 2021

PNG Malaria Elimination Strategies

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Range of Transmission Intensity

	Very High	High	Medium	Low	Very Low	End Game	Zero	Maintaining Zero
Annual Parasite Incidence (API)	650+	500	350	175	20	<5	0	
Median Parasite Prevalence (PfPR)	50%+	35%	20%	10%	1%	<1%	0	

'Progress towards malaria-free status is a continuous process and not a set of independent stages.'

Countries, sub-national areas and communities are situated at different points along the path towards malaria elimination, and their rate of progress will differ depending on the level of investment, biological determinants (related to the affected populations, the parasites and the vectors), environmental factors, strength of health systems, and social, demographic, political and economic realities.'

Global technical strategy for malaria 2016–2030

Pillar 1

Ensure universal
access to malaria
prevention,
diagnosis and
treatment

Pillar 2

Accelerate efforts
towards elimination
and attainment of
malaria-free status

Pillar 3

Transform malaria
surveillance into a
core intervention

Supporting element 1. Harnessing innovation and expanding research

Supporting element 2. Strengthening the enabling environment

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Global technical strategy for malaria 2016–2030



Supporting elements

Pillars



Pillar 1.

Ensure access to malaria prevention, diagnosis and treatment as part of universal health coverage.

Community Malaria Volunteers (CMV)

- Expanding access to vulnerable people
- Provide access to Rapid Diagnostic Test and first line malaria treatment (Artemether Lumefantrine)
- 800 Volunteers, in 7 Provinces
- 3-5 Days of Training - Provincial CMV Supervisor
- 44,000 Tests and treated 25,000 positive cases



Community Malaria Volunteers (CMV)

Positives

- Increases malaria prevention and treatment visibility in communities
- Early treatment reduces severe disease and potential deaths
- Early treatment can prevent transmission by killing the malaria parasite before it develops into a transmissible stage (gametocytes)

Challenges

- Volunteer fatigue
- Plasmodium Vivax cases not receiving effective dose of Primaquine
- Case data needs to be merged into National Health Information System
- Cadre may be absorbed into new Village Malaria Assistant role proposed by National Department of Health

Pillar 3.

Transform Malaria Surveillance Into A Key Intervention

- e-National Health Information System

The image displays three screenshots of the National Health Information System (NHIS) Malaria Patient Data Entry form. The form is titled "NATIONAL HEALTH INFORMATION SYSTEM" and "MALARIA PATIENT DATA ENTRY". It includes fields for Village, Location, Age, Sex, Diagnostic Tool Used, Test Result, and Treatment. The first screenshot shows the "Location" dropdown menu with options: Plasmodium falciparum, Plasmodium vivax, Plasmodium ovale, Plasmodium malariae, Mixed infection (Inc. P. falciparum), Non - P. falciparum, Negative, and No Result. The second screenshot shows the "Treatment" dropdown menu with options: No Treatment, Artemether Lumefantrine (ACT), Dihydro-artemisinin-piperaquine (DHP), ACT and Primaquine (PQ), DHP and PQ, Artesunate injection IV/IM, Artesunate retractor caps, Quinine (QN) Injection, QN and Sulfadoxine/pyrimethamine, Artesunate IV/IM and QN tabs and SP, QN IM and QN tabs and SP, and QN IM and QN tabs and Doxycycline. The third screenshot shows the "Test Result" dropdown menu with options: Blood Slide, RDT, and Clinical Diagnosis.



Dashboards

- Monitor treatment quality, species, positivity, drug shortages

Malaria Treatment

<div> <div></div> Most patients treated <div></div> 2nd most treated <div></div> 3rd most treated <div></div> 4th most treated </div>														
Test result	ACT and Primaquine (PQ)	Arthermeter Lumefantrine (ACT)	DHP and PQ	No Treatment	Dihydro-artemisinin-piperaquine (DHP)	Artesunate injection IV/IM	Artesunate rector caps	Quinine (QN) Injection	QN and Sulfadoxine / pyrimethamine	Artesunate IV/IM and QN tabs and SP	QN IM and QN tabs and SP	QN IM and QN tabs and Doxycycline	Primaquine (Single Dose)	Total
Mixed infection (Including <i>P. falciparum</i>)	17049	854	46	52	23	126	2	2	31	58	17	1	11	18272
Non <i>P. falciparum</i>	10715	690	18	60	29	58	0	0	15	29	2	0	0	11616
<i>Plasmodium falciparum</i>	7708	2062	196	42	21	104	1	0	18	18	5	0	5	10180
<i>Plasmodium vivax</i>	82	18	3	1	0	0	0	0	0	1	1	0	0	106
<i>Plasmodium ovale</i>	3	0	0	0	0	0	0	0	0	0	0	0	0	3
<i>Plasmodium malariae</i>	19	3	1	0	0	0	0	0	0	0	0	0	0	23
Negative	33	3	0	33544	0	0	0	0	0	1	0	1	0	33582
No Result	6	2	0	562	0	1	0	0	0	0	0	0	0	571
NA	0	0	0	10	0	0	0	0	0	0	0	0	0	10
Clinical	113	49	0	1	20	1	0	0	0	0	0	0	0	184
Total	35728	3681	264	34272	93	290	3	2	64	107	25	2	16	74547

Source: Malaria register

New Ireland - Shortages

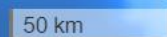






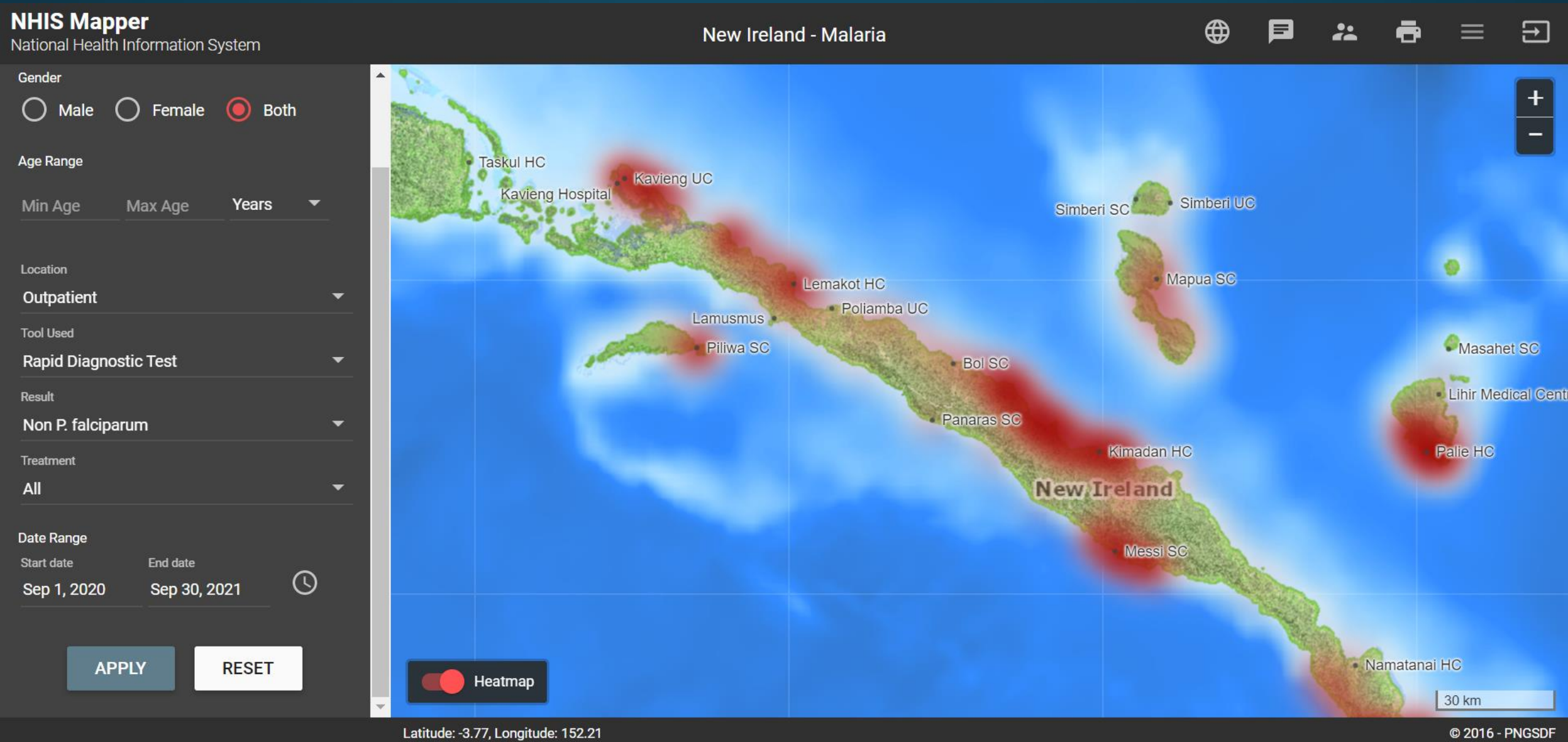

- Vaccine
- General
- Information System
- HIV/AIDS
- Family Health

RESET

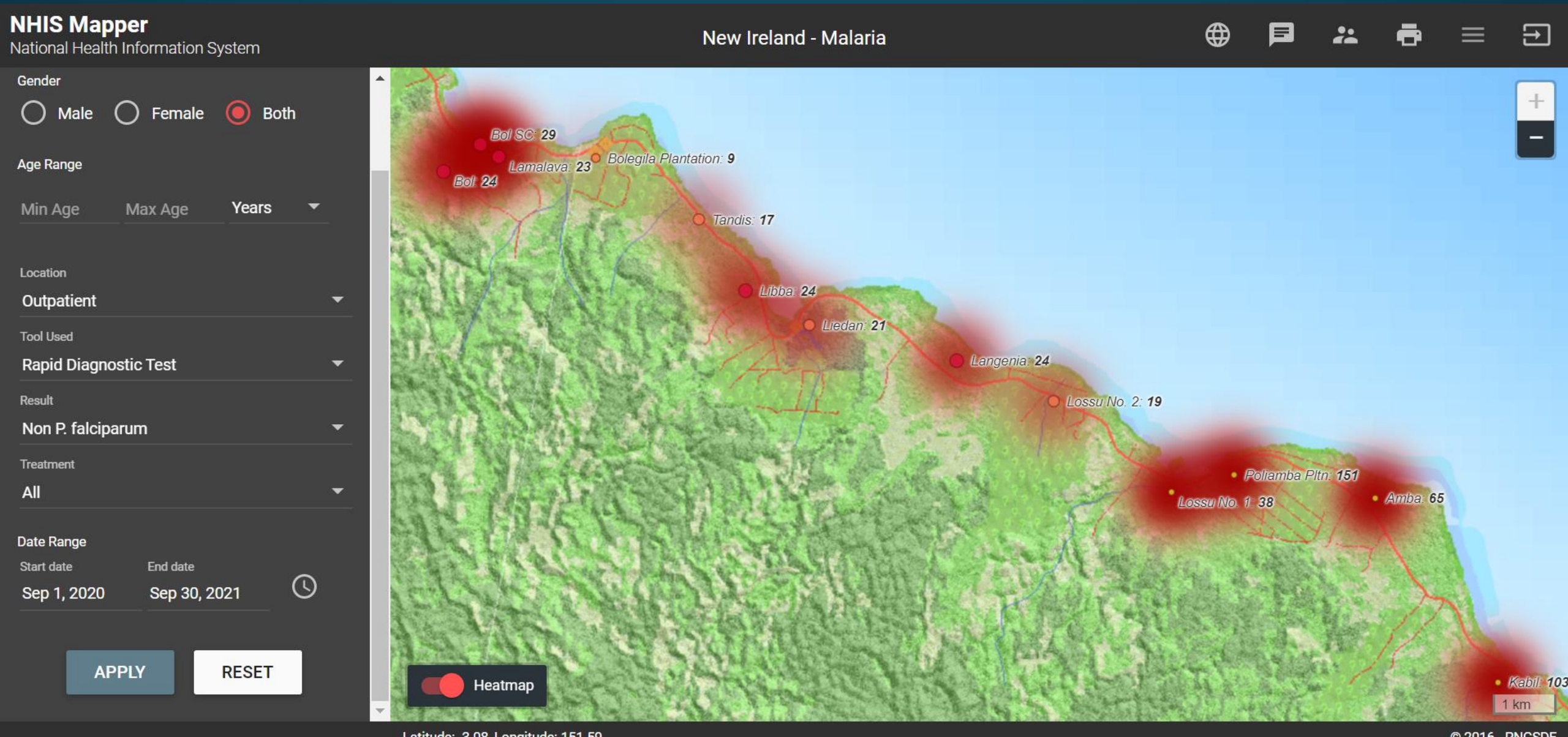


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Heat Map – All Non-Pf cases (likely *P. vivax* cases) in New Ireland Province



Heat Map – All Non-Pf cases (likely P. vivax cases) by village



PILLAR 2. Accelerate Efforts Towards Elimination And Attainment Of Malaria-free Status

- All countries should aim to eliminate malaria
 - target both the vectors and the parasites
- Adapt national strategies for intensified response
- Enact legislation
- Renew political commitment, increase multisectoral support and deepen regional collaboration
- Detect and treat all malaria infections for free
- Implement transmission-blocking chemotherapy
- Intensify surveillance efforts
- Implement targeted malaria vector control

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Rotary Grants Project

Outreach Response Teams – Tikana Local Level Government Area, New Ireland Province



Tikana LLG

- 33,000 People
- 4 Health Centres
- 20 Community Village

Project

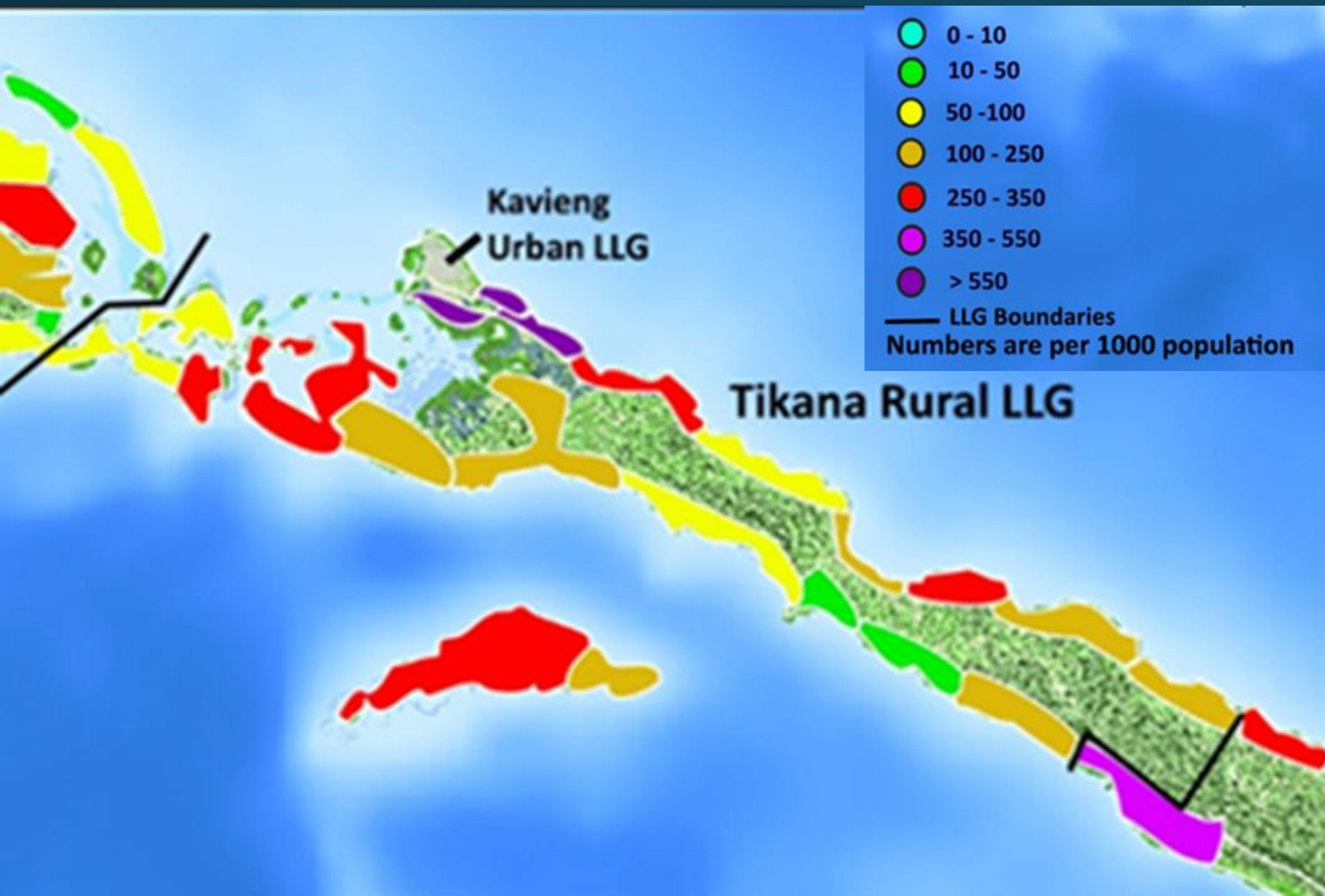
Pilot the introduction of Outreach Response Teams

Objective.

- Use surveillance data to mount a timely and targeted response based on various transmission dynamics.
- Develop Outreach Response Team capacity
- Develop Standard Operating Procedures
- Develop model that can be taken to scale

Outreach Response Team – Roles and Responsibilities

- Determine level of transmission
- Support CMVs in follow up testing and treatment for *P. vivax* cases
- G6PD Testing and effective dose primaquine
- Targeted vector control – Indoor Residual Spraying / Larval Source Management



Future opportunities

- Expansion of pilot
- Surveillance system integrating cases to household and intervention
- Presumptive Household Treatment
- Spatial Repellent
 - Early evening / outdoor biting mosquitos

Challenges

- Political focus
- Capacity within National and Provincial Health Systems
- Coordination between National Program, Donors, Development Partners, Researchers, Technology Development, Regulators
- Translation from Research to Program Implementation

A Glass

**Half
Empty?**

...or

**Half
Full?**

Positives

- Opportunities with Private Sector involvement
- Funding available
- RAM Conference
- Advocacy Groups APMEN, APLMA
- New technology is available
- Good people doing good work