Innovative Malaria Projects through Public Private Partnerships in Papua New Guinea Islands Region

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The Shrinking Malaria Map
Prevalence of Malaria in Asia Pacific

Plasmodium Falciparum Malaria

Plasmodium Vivax Malaria

Regional Commitment to Malaria Elimination

Asia Pacific Leaders Malaria Alliance
Asia Pacific Malaria Elimination Network
Malaria Elimination by 2030
New Guinea Islands Region and Milne Bay

PNG National Incidence
102/1000 pop

Approx: 900,000 cases
1,200 deaths
(Source: WHO World Malaria Report 2016)

New Guinea Islands Region
Inc: 149/1000 pop

Milne Bay Province
Inc: 315 / 1000 pop
(Source: PNG Sector Performance Annual Review 2015)
Proposed New Guinea Islands Malaria Alliance Initiative (NGIMAI)

Manus Province Malaria Alliance – MPMA

ARoB Accelerated Malaria Control Project – AMCP

New Ireland Province Malaria Alliance – NIPMA

Lihir (Group) Malaria Elimination Project - LMEP
New Guinea Islands Malaria Projects: Collaboration agreements

**Manus Provincial Malaria Alliance (MPMA)**
- Shared Sky
- Manus Provincial Government
- World Vision funded the MPMA Scoping Study phase of work
- Transfield Services funded the work completed to date on the MPMA Pre-Feasibility Study

**Autonomous Region of Bougainville Malaria Control Project (AMCP)**
- Shared Sky
- Bougainville Healthy Communities
- ARoB Department of Health and their service providers
- DFAT funded the AMCP Scoping Study phase of work

**New Ireland Provincial Malaria Alliance (NIPMA)**
- MoU between the National Department of Health, New Ireland Provincial Government and Shared Sky Pty Ltd
- Agreement between Shared Sky – (Project Manager), Newcrest Mining, Nautilus Minerals, Simberi Gold Mine, New Britain Palm Oil, Australian Doctors International, New Ireland Provincial Government
- Financial and in-kind contributions to funded the NIPMA Concept Note development and toward the NIPMA Scoping Study phase of work
Stakeholder Engagement

**Political**
Health Minister – Hon. Michael Malabag
New Ireland Governor, Hon. Sir Julius Chan
Member for Kavieng District Hon. Ben Micah
Member for Namatanai District Hon. Byron Chan

**Administrative**
Deputy Secretary National Department of Health
New Ireland CEO Health
Provincial Executive Council
District Administrators, District Health Managers
Provincial Health Authority
Provincial Health Staff
New Ireland Provincial Malaria Alliance

- Shared Sky – Project Managers
- New Ireland Provincial Government
- Provincial Health Authority
- Newcrest Mining
- Nautilus Minerals
- New Britain Palm Oil
- Simberi Gold
- Australian Doctors International
Agreement Challenges

• Diverse range of partners lacking a common framework / platform for engagement

• Fragmented financial support

• Implementation of the new Provincial Health Authorities (Manus, New Ireland)

• New Ireland Declaration of Autonomy
Assessment Criteria

- National Health Standards Survey
- Drug and Diagnostic Supply Chain Review
- Clinical Case Management Review
- Vector control Assessment
- Health Village Health Wards Programs
Malaria determinant variables

Value Proposition for NIP
- Engaging Private Sector to comply with National Guidelines
- Integrated approach to malaria control
- Leverage lessons learned from Manus, ARoB, Lihir Group, PNG Industry Malaria Initiative
- Collaboration with ARoB Health Wards, Healthy Villages Program
- Establish best practice environmental management and vector control
- Improve supply chain management for Diagnostic and Malaria Drugs
- Elimination of poor quality and ‘mono-therapy’ medicines. (to prevent drug resistance)
- Health Sector Human Resources upskilling: Case Management, Control efforts, Data Management
- Meets international donor expectations for PPP engagement and cost sharing

Value Proposition for Industry Participants
- Reduced burden on operations – absenteeism, employee effectiveness
- Reduced costs on treatment, transfers, medicines
- Improve effectiveness of company initiated community programs
- Improved ‘social licence to operate’

SHARED SKY PTY LTD

Geography
Healthy Village Program
Demographic
Political
Health Facilities
Malaria Burden - local over time
Infrastructure
Transport
Malaria species found
Malaria hot spots
Manus Malaria Impact Zones and malaria transmission areas

- Field based ground proofing
- Data and ecological assessments
Autonomous Region of Bougainville

Malaria Impact and Management Zones

Field based ground truthing and data collation

Plus

eNational Health Information System
• Rural Primary Health Services Delivery Project
eNational Health Information System

Real time data analysis with each patient at health centre via mobile phone connection to NDoH server
Real time query on P falciparum cases for all of Bougainville for past 3 weeks.
Query identifies 4 communities around Buka town with current *P falciparum* cases.
Focus in on the community of Hujena then switch to Satellite image
Each red dot represents a house. Each green dot represents a non house structure.
Patient stated he lives in second row of houses behind the school in Hutjena.
Case investigation, active case detection and targeted vector control able to be carried out in vicinity of surrounding houses.
Tablet data input also records current drug and diagnostic supplies.

- **Green dot** – sufficient stocks
- **Orange dot** – nil stock for 1 month
- **Red dot** – nil stock for 2 months
- **Red pulsing** – nil stock for 3 months
New Ireland Preliminary Malaria Zones
New Ireland Malaria Project

Manual retrospective data entry from in Health Office from Malaria Register Forms. Data is entered once forms are transported to central office with internet access.
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• Private sector willing and able to adapt for mutually beneficial outcomes
• Requires greater dialogue between partners to better understand their individual drivers
• Clear ‘rules of engagement’ and framework required to streamline process
• Recognition of partners competitive advantage
• Appropriate cost and resource (in-kind and financial) sharing – not cost shifting