

GEDSI Analysis of the STRIVE, NATNAT and ADVANCE Programs

Gender equality, disability and social inclusion in vector-borne disease implementation and health systems strengthening programs



STRIVE

STRONGER SURVEILLANCE
FOR VECTOR BORNE PATHOGENS



NATNAT

Newly Adapted Tools Network Against
mosquito borne disease Transmission
PAPUA NEW GUINEA



STRIVE, NATNAT and ADVANCE are supported by the
Australian Government.



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Acronyms

ADVANCE	Diagnostics for Integrated Case Management, Actionable Surveillance, and Accelerated Elimination of Malaria and Neglected Tropical Diseases in the Asia-Pacific
BCC	Behaviour Change Communication
CSO	Community Service Organisation
DFAT	Department of Foreign Affairs and Trade
GEDSI	Gender Equality, Disability and Social Inclusion
GBV	Gender-based Violence
HCWs	Health Care Workers
HIV	Human Immunodeficiency Virus
IEC	Information Education Communication
IRS	Indoor Residual Spray
KPAC	Key Populations Advocacy Consortium
ITN	Insecticide Treated Nets
LGBTQIA+	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Asexual
MELF	Monitoring Evaluation and Learning Framework
NATNAT	Newly Adapted Tools Network Against Mosquito-borne Disease Transmission
NHIS	National Health Information System
NGO	Non-governmental Organisation
OPD	Organisation of People with Disability
PHA	Provincial Health Authority
PNG	Papua New Guinea
PNGADP	PNG Assembly of Disabled Persons
PNGIMR	Papua New Guinea Institute of Medical Research
PSGDN	Pacific Sexuality and Gender Diversity Network
ODA	Official Development Assistance
RDT	Rapid Diagnostic Test
SARV	Sorcery accusation-related violence
SE	Spatial Emanator
SOGIESC	Sexual Orientation, Gender Identity and Expression and Sex Characteristics
STIs	Sexually Transmitted Infections
STRIVE	Strengthening Integrated Surveillance and Response for Vector-Borne Diseases in Melanesia
TB	Tuberculosis
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNDP	United Nations Development Programme
VBD	Vector-borne disease
VCT	Vector Control Tools

1. Introduction

This report summarises the findings of a gender equality, disability and social inclusion (GEDSI) analysis conducted to inform three vector-borne disease (VBD) research projects. These research projects are being implemented in Papua New Guinea (PNG). There are also network-building, knowledge-sharing and mutual skills-strengthening activities being implemented with colleagues in Vanuatu and Solomon Islands, leveraging the skills and achievements in PNG to enhance VBD research and projects across Melanesia.

This GEDSI analysis demonstrates, through a detailed review of literature and project research, that VBD diagnosis, treatment and care are affected by the interplay between age, disability, culture, ethnicity, gender, linguistics, nationality, physical isolation and socio-economic status. Where these characteristics intersect, vulnerability and exclusion can be exacerbated. People living with disabilities, women and other gender minorities, and women experiencing gender-based violence (GBV) may be overlooked or under-served in VBD surveillance and treatment activities reducing the overall impact and effectiveness of VBD initiatives and interventions. Certain social groups are at greatest risk of malaria morbidity and mortality and are hardest to reach with existing services and interventions. These include pregnant women and people, children, tribal and Indigenous populations, migrant or displaced populations, and individuals that face occupational risks from working outdoors for prolonged periods of time.

PNG accounts for the vast majority of malaria cases in the Western Pacific Region, with nearly 87.5% of the total malaria cases and 91.6% of malaria deaths in 2023.¹ Contributing factors include issues with bed net quality, persistent outdoor transmission, and emerging insecticide resistance. Currently, insecticide-treated nets (ITNs) are the primary malaria and VBD control tool in PNG and other Pacific Island Countries (PICs), funded mainly by international donors, but there is a lack of resources and personnel for broader vector control efforts.² These three projects will contribute to the evidence base for reducing the malaria burden in PNG and the region.

Noting the geographical distribution of STRIVE, NATNAT and ADVANCE, this GEDSI analysis has been developed in alignment with the proportion of activities in each country (approx. 80% PNG, 10% Solomon Islands and 10% Vanuatu). An enhanced focus on GEDSI will enable STRIVE, NATNAT and ADVANCE projects to create spaces for new

¹ World Health Organization, 2024

² Cleary et al., 2022

conversations with VBD project partners and the community about GEDSI practises and set project expectations to drive more inclusive outcomes.

Projects

The three projects being implemented are Strengthening Integrated Surveillance and Response for Vector-Borne Diseases in Melanesia (STRIVE); the Newly Adapted Tools Network Against Mosquito-borne Disease Transmission (NATNAT); and the Diagnostics for Integrated Case Management, Actionable Surveillance, and Accelerated Elimination of Malaria and Neglected Tropical Diseases in the Asia-Pacific (ADVANCE).

STRIVE aims to strengthen integrated vector-borne disease surveillance and response capacity in PNG, Solomon Islands and Vanuatu, through meaningful partnerships and sustainable, innovative approaches to surveillance and response. The project began operating in PNG in 2018, and it is now in the second project iteration phase, running from 2024 – 2028.

The End of Program Outcomes are:

1. National and sub-national health systems are strengthened through integrated sentinel, serological, laboratory and vector sentinel surveillance of VBD outbreaks, resurgent, resistant or emerging pathogens
2. National health systems have tangible and equitable policy options to address barriers to effective surveillance, disease notification and use of data for decision-making to better support healthcare workers at national and sub-national levels
3. PNG, Vanuatu, and Solomon Islands have effective partnership models with relevant VBD stakeholders to realise meaningful, sustained and equitable change
4. Strengthened integration of One Health approaches and climate change considerations for emerging vector-borne disease threats in PNG and regionally
5. The participation, representation and leadership of women, people living with a disability and underrepresented groups in VBD research and programming is strengthened

STRIVE project partners are:

- Burnet Institute
- PNG Institute of Medical Research (PNGIMR)
- PNG Central Public Health Laboratory (CPHL)
- PNG National Department of Health (NDoH), National Malaria and Vector Borne Disease Program
- The University of PNG School of Medicine and Health Sciences (SMHS)
- The National Agriculture Quarantine and Inspection Authority (NAQIA)
- Vanuatu Ministry of Health (VMoH)

- Solomon Islands Ministry of Health and Medical Services (SI MHMS)
- Walter and Eliza Hall Institute (WEHI)
- Menzies Institute
- University of Queensland (UQ)
- Deakin University – University Australian Institute of Tropical Health and Medicine (AITHM) at James Cook University
- CSIRO Australian Centre for Disease Preparedness (ACDP)
- Australian Defence Force Malaria and Infectious Disease Institute (ADFMIDI)
- Beyond Essential Systems (Tupaia)
- Pest and Environmental Adaptation Research Group (PEARG) at University of Melbourne
- Trilateral Malaria Project (TMP) – Project in collaboration with the People’s Republic of China, Australia, and Papua New Guinea

NATNAT aims to improve capacity within PNG to assess and adopt novel VCTs, generate local evidence and strengthen local leadership to drive access, uptake and impact of new vector control tools. This will allow for expedited implementation of VCTs identified as being efficacious in the country. In NATNAT Phase 1 (2020-2023), there was a focus on building the infrastructure, systems, capabilities, and stakeholder network required to comprehensively evaluate new vector control tools in laboratory, experimental hut and field-based settings. NATNAT has evaluated residual spraying, spatial emanators and larval source management, and will continue evaluations of spatial emanators in 2024-2027. Residual spraying refers to coating walls and surfaces with insecticide, while larval source management includes modifying, removing or treating habitats where mosquito larvae and pupae live. A spatial emanator provides a protected space by releasing active ingredients which drive away mosquitos.

NATNAT Phase 2 (2024-2027) will capitalise on the infrastructure built in Phase 1 to produce evaluations of the effectiveness, community acceptability and feasibility of a variety of Vector Control Tools. The objectives of NATNAT 2 are:

1. Generate evidence on the entomological efficacy of the Guardian® spatial emanator and evaluate its effectiveness (with epidemiological endpoints), feasibility and acceptability as a complementary vector control tool (to ITNs) to improve vector-borne disease control in PNG and the Pacific region
2. Implement Quality Management Systems in all workstreams of the Belna Natnat Centre (BNC), thereby contributing to the sustainability of the investment
3. Strengthen partnerships with vector control stakeholders to drive access (via both public and private delivery pathways), uptake and impact of new VCTs through the Vector Control Network

4. Establish *Aedes aegypti* colonies, including resistant strains at BNC to expand the testing capability of BNC, contributing to business continuity planning
5. Utilise the evidence package of residual spraying in PNG (pending stage gate) to conduct advocacy and garner support for the implementation of residual spraying as a complementary vector control tool in PNG and the region

The project will also continue to support PNG expertise, leadership and advocacy to enable access, accelerate uptake and assess impact of new VCTs in PNG, with the aim to generate evidence for the wider malaria-endemic parts of the Pacific region.

NATNAT project partners are:

- Burnet Institute
- PNG Institute of Medical Research
- James Cook University
- PNG National Department of Health (NDoH), National Malaria and Vector Borne Disease Control Program
- Rotarians Against Malaria
- Vector Control Network – comprising 8 Provincial Health Authorities, 7 private sector companies and national stakeholders (PNG DF, NAQIA, NDoH)
- Innovative Vector Control Consortium

ADVANCE aims to demonstrate the impact and feasibility of using highly sensitive, next generation malaria rapid diagnostic tests (NextGen RDT) to identify malaria. Generally, in the field setting, microscopy is sensitive enough to detect malaria in most symptomatic individuals; however, in areas where the infrastructure and personnel to perform microscopic diagnosis are not available, RDTs are a suitable alternative. While RDTs can be simply performed and interpreted, they also have low sensitivity for detecting some species of plasmodium (the parasites which cause malaria) and do not perform sufficiently when parasite density is low or the patient is asymptomatic. ADVANCE is evaluating the performance of emerging RDTs which have increased sensitivity (NextGen RDT) and assessing the feasibility and cost-effectiveness of implementing the NextGen RDT in both high and low transmission settings in PNG and Laos. The Laos component of the project is out of scope for this GEDSI analysis, which will focus on PNG, Vanuatu and Solomon Islands. This work is being achieved through three key workstreams:

- Research and development
- Clinical evaluation
- Availability and access

ADVANCE project partners are:

- PATH – USA & Vietnam
- WEHI – Australia
- Burnet Institute – Australia
- Papua New Guinea Institute of Medical Research (PNGIMR)
- Healthy Poverty Action (HPA) - Laos
- Laos Center for Malariology, Parasitology, and Entomology (CMPE)

Scope

The Gender Equality, Disability and Social Inclusion (GEDSI) analysis of the three projects STRIVE, NATNAT and ADVANCE was undertaken to provide the following complementary outcomes:

- Improved understanding among STRIVE, NATNAT and ADVANCE project staff and partners on how gender, disability and social inequalities influence VBD surveillance, acceptance and uptake of services, with a focus on malaria as a critical VBD in the region.
- Strengthened approaches to gender, disability, social inclusion, diversity and inclusion in STRIVE, NATNAT, ADVANCE governance and monitoring.
- A common understanding among STRIVE, NATNAT and ADVANCE stakeholders on the value of GEDSI to strengthen collaboration and uptake.

The analysis focuses primarily on Papua New Guinea, as this is the main site of all three projects. STRIVE builds upon the achievements in PNG to facilitate network-building and regional knowledge-sharing with VBD organisations in Vanuatu and Solomon Islands. This includes extending invitations to attend trainings in PNG, and facilitating opportunities for PNG experts to share learnings and resources with Vanuatu and Solomon Islands colleagues. However, direct implementation of surveillance activities will remain limited to PNG. As such, this analysis focuses on the PNG context, with a brief summary of considerations for Vanuatu and Solomon Islands. Burnet is subcontracted to implement the ADVANCE project in both PNG and Laos. As the US-based organisation PATH is leading the ADVANCE consortium, ADVANCE will deliver an independent GEDSI analysis of all project sites, including Laos. To avoid duplicative work, this GEDSI analysis does not focus on Laos, and instead focuses on ADVANCE in the PNG context; the Laos component of the project will be informed by PATH's Laos GEDSI analysis.

2. Methodology

This analysis draws upon academic articles, publicly available data on VBDs, and assessments from the United Nations and other aid and research organisations (see section 11 for full list of references). In addition, primary data from the STRIVE and NATNAT projects has been utilised. This analysis focuses on PNG but also includes a brief summary of the GEDSI context in Vanuatu and Solomon Islands to inform regional engagements and activities.

The data and reports from STRIVE used in this analysis include health facility assessment reports (baseline, midline, and endline) conducted in Phase 1 of STRIVE, project design documents (monitoring, evaluation and learning framework (MELF) and program logic), STRIVE's data visualisation platform (TUPAIA), and Protocol and Case Report Forms. Data and reports from the NATNAT project used in this analysis include the NATNAT Protocol, NATNAT annual reports, MELF, NATNAT Acceptability report and the Complete Project Specifications for NATNAT 2024-2027.

Approaches

This analysis draws upon the Gender at Work Framework³ to ensure that socio-cultural, geographic and government sectoral differences across education, health, and transport are assessed and included where relevant, and utilised the following approaches to guide analysis of documents;

- Intersectionality: applied an intersectional analytical framework to VBD projects to understand how barriers based on ethnicity, age, gender, sexual orientation, socioeconomic status, and disability compound and impact VBD access in different contexts. In the context of health research, intersectionality is a methodology for identifying and understanding the relationships between identity and systems of oppression and is increasingly being utilized to conceptualise and address disparities and social inequality in health.⁴
- 'Do no harm' approach: considered the impact (intended and unintended) that the research being undertaken by the projects could have on different groups and took steps to mitigate and respond to potential negative impacts when collecting primary data.
- Context sensitivity: considered the local context of each project, including culture, language, norms, power dynamics, social relations, and so on, and adapted

³ Gender at Work, 2024

⁴ Kelly et al, 2022

activities, language and processes to be relevant and appropriate for that specific context.

Utilising these approaches this analysis examines:

- Laws, policies, programmes, resource allocation and accountability mechanisms
- The impact of social norms, attitudes, roles, and exclusionary practices on the risk of contracting malaria and other vector-borne illnesses
- Access to and control over resources, services and opportunities, particularly access to health care.

Limitations

There are several limitations to this analysis. The team was unable to find a Papua New Guinean with GEDSI analysis expertise who had the time and availability to be engaged in conducting this analysis. The project partners did engage Papua New Guinean principal investigators and qualitative researchers in reviewing the analysis, but the consultant engaged conducted the research remotely. Although the analysis did use primary data, such as the Matchbox Study, STRIVE surveillance data, and NATNAT Acceptability Studies, it is nonetheless a desk-based review. It is worth noting that terminology being used throughout this analysis, such as SOGEISC, are not readily utilised or understood within the context being explored and have inherent limitations. Similarly, understandings or definitions of gender and disability differ greatly across cultures and languages, making it challenging to define them in a contextually appropriate way that is widely understood.

3. Organisational Policy Context

The GEDSI analysis and subsequent project action plans are aligned to DFAT's International Development Policy (August 2023),⁵ in addition to the more recent Australia – Papua New Guinea Development Partnership Plan (DPP) 2024-2029 (launched September 2024) and International Disability Equity and Rights Strategy (launched November 2024)⁶.

This GEDSI analysis reflects a broader commitment across the Pacific region to advance gender equality, women's empowerment, and disability and social inclusion, as highlighted in Australian, PNG, Solomon Islands and Vanuatu Government strategies, policies and commitments. This will enable these projects to contribute to the following DFAT commitments:

⁵ DFAT, 2023

⁶ DFAT, 2024a

- 80% of development investments effectively address gender equality in implementation⁷
- New Official Development Assistance (ODA) investments over 3 million AUD have a gender equality objective as their end of project outcome⁸
- Ensuring new international development investments are informed by a disability analysis⁹
- Supporting the capacity of national statistic offices and OPDs to collect, analyse, share and use disability disaggregated data¹⁰
- 60% of development and humanitarian investment perform effectively on disability equity by 2026, and 70% by 2030.¹¹

4. PNG GEDSI Analysis

This section examines key government policies relating to gender equality, disability rights and equity and VBD response, providing insight into current priorities, constraints and gaps within the PNG context in which the three projects operate.

Laws, policies, programmes, resource allocation and accountability mechanisms

National Gender Equality Policies

The PNG government has several gender policies and initiatives, demonstrating a commitment to gender equality objectives. The National Policy for Women and Gender Equality 2011-2015¹² and the National Health Sector Gender Policy¹³ both focus on overcoming the disadvantages women and girls face in accessing health services and improving their health outcomes. Both policies consider how gender norms intersect with vulnerabilities arising from disability status and living in rural locations. The PNG National Policy for Women and Gender Equality 2011-2015 was developed in response to the 2030 Agenda for Sustainable Development, and focuses on Sustainable Development Goal (SDG) 5: ending all forms of discrimination against all women and girls.¹⁴ The Women and

⁷ DFAT, 2022

⁸ Ibid

⁹ DFAT, 2024a

¹⁰ Ibid

¹¹ Ibid

¹² Department of Community Development, 2011

¹³ Health Sector Gender Policy, 2014

¹⁴ United Nations, 2016

Gender Equality Strategy 2023-2025¹⁵ also recognises that women with disability are a priority population. However, with no monitoring framework or evaluation of these policies available, it is unclear to what extent the objectives have been met.

The National Strategy to Prevent and Respond to Gender Based Violence 2016-2025 aims “to strengthen and institutionalize the work on GBV in order to achieve zero tolerance towards GBV as per the Papua New Guinea Vision 2050.”¹⁶ The Strategy recognises that the GBV programs often focused on awareness raising rather than establishing services, improving service delivery, or a transformative approach to gender, and that a lack of funding and a dependency on a volunteer workforce has contributed to difficulties in reducing GBV. Practices and beliefs around sorcery are another factor contributing to gender-based violence. In 2022, the PNG parliament introduced new provisions to criminalise sorcery-related accusations, with a Governor recognising that ‘a large number of sorcery accusation-related violence (SARV) cases use ‘*glasman*’ or ‘*meri*’¹⁷ to accuse women or girls of violence, who are subjected to extreme acts of violence, torture and rape, and eventually killed’.¹⁸

National Disability Policies

Following the ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) in 2013, the government developed the PNG National Policy on Disability 2015-25.¹⁹ A key strategic goal of this policy is to improve access to quality services and support programs for people living with disabilities, in partnership with community service organisations (CSOs). This policy recognises the need for building the CSO network to strengthen the reach, quality, number and appropriateness of the services delivered, along with improved referral processes. It also recognises the need for pursuing service delivery reform to include priorities like inclusive education, health and rehabilitation. However, it is unclear what progress towards these goals has been achieved, especially to increase access to health services. In September 2024, a draft disability law was submitted to PNG parliament, but it has not been passed as yet.²⁰ This law, once passed, will bring PNG towards legal harmonisation with the UNCRPD and enact a legal framework that enshrines rights for people with a disability; for example, by providing legal recourse to a worker with disability who has been discriminated against or wrongfully dismissed due to their disability.

¹⁵ UNDP, 2023

¹⁶ Independent State of Papua New Guinea, 2016

¹⁷ *Glasmen and glasmeri can be loosely translated to traditional healer / shaman / sorceress.*

¹⁸ Rodrigues, 2022

¹⁹ Department for Community Development and Religion, 2015

²⁰ CBM, 2024

While the policies described above demonstrate that the PNG Government recognises the need for strategic interventions to support progress on gender equality, disability and social inclusion; it is noted that that support structures are mainly provided at the familial or community level through church networks, especially in rural and remote areas, indicating that there is significant scope for improving the reach and coordination of services.²¹

National Malaria Policies

The PNG National Malaria Strategic Plan 2021-2025 recognises the need to target and respond to marginalised communities, and the additional risk and mortality burden faced by pregnant women and children.²² Key PNG national malaria program priorities include:

- To immediately augment intensive malaria prevention and case management services targeting populations in PNG's most remote and most endemic communities, and PNG's most underserved and marginalized populations in urban settlements
- To support professional development for staff involved in malaria related activities especially at district and at provincial level nationwide
- To rapidly accelerate burden reduction efforts in the two lowland provinces of Madang and Morobe (key sources of malaria infection that threaten epidemic prone highland provinces)
- To rapidly accelerate burden reduction efforts and progressively roll-out malaria elimination activities in selected provinces/islands embarking on elimination.

These priorities underlie the approach of all three projects in PNG, which aim to generate evidence on vector-borne disease prevalence and prevention that is inclusive of all members of the community, and generate evidence which is disaggregated by a variety of factors, including age, sex, location, and disability status, to better understand how social norms, discrimination, and exclusion impact the risk of contracting malaria, access to vector-control tools, and access to diagnosis and healthcare.

5. GEDSI in PNG

This section outlines the gender, disability and social inclusion landscape in PNG, providing context of the setting in which the STRIVE, NATNAT and ADVANCE projects

²¹ CBM, 2020

²² PNG National Malaria Control Program, 2021

operate. Further sections will detail the specific ways by which inequalities and social norms affect the risk of contracting malaria and accessing treatment.

Gender Inequality

PNG has some of the highest rates of gender inequality in the world, ranking 160 out of 161 countries on the UNDP's 2021 Gender Inequality Index.²³ Women have low levels of participation in decision-making, and experience high levels of gender-based violence.²⁴ Women and girls in PNG face significant barriers to accessing education, with less than half (47%) of girls in PNG attending primary school, and only 17% of girls attending secondary school.²⁵ Poor access to water, sanitation and hygiene infrastructure, coupled with low awareness of healthy hygiene behaviours and difficulties accessing adequate health services, contribute to poor health outcomes for women and the wider population.²⁶ Health outcomes for women and girls in PNG are some of the worst in the Asia-Pacific region, with the highest maternal mortality ratio in the Western Pacific.²⁷

Gender-related norms and barriers operate at multiple levels, from the individual and the household to the community and health systems. Often, these norms and barriers are underpinned by inequitable power relations, and lead to different opportunities, limitations, challenges, needs and vulnerabilities, especially for women and girls, which affect their ability to make decisions and access health information and care.

Addressing gender-related barriers and the specific needs of girls, boys, gender-diverse people, women and men in accessing health services and increasing women's meaningful participation in the design and delivery of VBD projects will contribute to advancing gender equality and social inclusion.

Gender-Based Violence

PNG has one of the highest rates of gender-based violence (GBV) in the world, with at least 60% of women experiencing domestic or sexual violence throughout their lifetime; double the global average.²⁸ There are a myriad of contributing factors to high rates of GBV. There is a commonly accepted view that the man within a household has a right to use violence if their decisions are being challenged.²⁹ Bride price, a practice wherein men pay a price to

²³ UN Women, 2024

²⁴ *Ibid.*

²⁵ Raghupathi, 2020

²⁶ World Vision, 2024

²⁷ Li et al. 2024

²⁸ UNDP, 2023

²⁹ Spark, 2011

marry a woman, is practiced across PNG and is shown to contribute to the view that a man has a right over his wife and children.³⁰

Women with disabilities and older women face specific risks of additional forms of abuse. These include coercive and controlling behaviours such as withholding medicines, assistive devices or other aspects of care.³¹ Natural disasters, civil conflicts and other crises have been shown to lead to dramatic increases in rates of family violence,³² while there has also been a recent increase in GBV enacted through sorcery-related accusations.³³

Gender and Malaria Risk

Gender norms and attitudes can create different vector-borne disease exposure risks for men and women. PNGIMR's Matchbox Study found that men believe that they are less likely to be infected with malaria due to their biological strength.³⁴ In the same PNGIMR Matchbox Study, one Provincial Health Authority partner noted that men were reluctant to adopt behaviours seen as new or take advice which might be perceived as challenging their superiority, commenting "men always want to keep their status up by not succumbing to other ideas." By collating a range of similar comments from community members and healthcare workers, the study concludes that men often take more risks and are often reluctant to use mosquito nets and other malaria prevention tools. Likewise, a government partner noted "men are hard to convince so dissemination of information on the tools should be done thoroughly and clearly." This aligns with other research conducted in two villages in Madang province and New Ireland province, which found that adult men had low rates of protection from mosquito nets, compared to women and young children.³⁵ The study found that while 56% of preschool-aged children were protected by mosquito nets for more than 6 hours between 6 pm and 2 am, only 7% of adult men were protected.

In contrast, there was a high level of understanding on the importance of sleeping under a mosquito net amongst the female participants in the NATNAT focus group discussions.³⁶ A female participant from Megiar noted, "I like the mosquito net. Since I hate the mosquitoes buzzing to my ears... bed nets help us a lot". However, this understanding does not necessarily always result in taking preventative measures. Another female participant recognised that they were not taking any preventive measures when they are in the garden

³⁰ Ibid.

³¹ WHO, 2024

³² Pacific Women Lead, 2023

³³ UNDP, 2023

³⁴ Papua New Guinea Institute of Medical Research, 2021

³⁵ Rodríguez-Rodríguez et al., 2021

³⁶ Manuv et al, 2021

or collecting crabs, noting “there is nothing we do as mothers to prevent mosquito bites when going out in the bush, garden, bathing, or doing laundry... When it’s time to collect crabs in the bush or beach, there are many mosquitoes.” This suggests that participants may not be equipped to translate an understanding of the importance of malaria prevention into targeted action. Information Education Community (IEC) and Behaviour Change Communication (BCC) campaigns should consider these underlying beliefs and their influence on effective communication tools across genders.

Similarly, the gendered division of tasks and labour gives rise to different risk factors for men and women. The NATNAT baseline acceptability report identified those at risk of malaria infection included security guards who stand outside or fall asleep outside, and young men who often engage in activities such as fishing, hunting and gold panning.³⁷ A Provincial Health Authority partner commented, “Men and boys, maybe due to the kind of night activities they are engaged in the village setting. They go for fishing, hunting, uh, and especially some of our people along the rivers in Bulolo and... Bulolo district and part of Huon Gulf, they do, um, gold panning along the river. It's mainly men and young boys”. Another study found that women may be at a slightly higher risk of early morning exposure due to earlier wake times, highlighting how gendered caring and occupational roles creates different risks for exposure to vector-borne diseases.³⁸

Groups with Specific Risk Factors

Pregnant Women and People

Pregnant women and people are particularly vulnerable to malaria infection. The relatively limited data available from PNG indicates that pregnant women are more vulnerable to malaria than non-pregnant women.³⁹ Malaria contributes to adverse pregnancy and birth outcomes such as maternal anaemia, mortality, pre-term delivery and low birth weight.⁴⁰ Young, primigravid mothers are at greatest risk of placental malaria infection.⁴¹ Malaria in pregnancy is also associated with anaemia, stillbirth, low birth weight and foetal death.⁴² Pregnant women and people in PNG face high rates of malnutrition (44%); one review of malaria in pregnancy shows that malaria, anaemia and malnutrition are co-occurring, as malnutrition can increase susceptibility to malaria, and likewise malaria can contribute to malnutrition and low birth weight.⁴³ An earlier study conducted in PNG also found a higher

³⁷ *Ibid.*

³⁸ Rodríguez-Rodríguez et al., 2021

³⁹ Lufele et al, 2017

⁴⁰ Bauserman et al, 2019

⁴¹ Lufele et al, 2017

⁴² Bauserman et al, 2019

⁴³ *Ibid.*

risk of adverse maternal health outcomes if infected with *Plasmodium falciparum* at delivery.⁴⁴ As such, VBD programs should ensure interventions are designed to encourage participation by pregnant women and people.

The impact of malaria in pregnancy is compounded by a lack of accessible, quality, routine antenatal care.⁴⁵ Broader barriers to accessing healthcare in PNG, such as lack of adequate and affordable healthcare, intercommunal disputes preventing travel, gender discrimination and violence, autonomy to make decisions to access care, and inadequate transport, are often compounded for pregnant women and people, who may be less able to walk long distances or may have concerns about putting themselves and their unborn child in danger.⁴⁶ Additionally, often pregnant women and people are asymptomatic and aparasitaemic, making detection and treatment challenging.⁴⁷ At least half of placental infections are missed by current point-of-care tests.⁴⁸ Monthly intermittent preventive treatment in pregnancy (IPTp) with sulphadoxine-pyrimethamine (SP) is implemented through routine antenatal care from 2nd trimester in PNG and is designed to clear asymptomatic infections and provide post-treatment prophylaxis. However, resistance to SP is a problem and there is also evidence that infections in the first trimester of pregnancy are associated with maternal anaemia and poor outcomes.⁴⁹ Alternative diagnostic and treatment approaches are therefore required. The ADVANCE project aims to address some of these gaps by evaluating new rapid diagnostic tests (RDTs) with higher sensitivity for vivax infections than those currently used in PNG, which may improve diagnosis and treatment amongst all individuals with malaria infections, and in doing so improve health outcomes for pregnant women and people, and their newborns.

Children

Most countries recognise children, especially those under the age of 5 years as being a high-risk group in malaria elimination efforts. In PNG, there have been smaller-scale projects to engage school teachers and children in malaria control activities through knowledge building around prevention, testing, treatment and tracking of malaria.

People Living with a Disability

It is estimated that 975,000 people in PNG have a disability, which is roughly equivalent to 10% of the population.⁵⁰ A person with disability is defined to ‘include those who have long-

⁴⁴ Mueller, 2008

⁴⁵ Ibid.

⁴⁶ Klaver and Coe, 2018

⁴⁷ Lufele et al, 2017

⁴⁸ Umbers et al, 2015

⁴⁹ Accrombessi, 2019

⁵⁰ CBM, 2020

term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others'.⁵¹ This figure could be an underrepresentation, considering that there is scarce data on disability prevalence in PNG, 16% of the global population are estimated to experience significant disability⁵² and some other organisations, such as the Humanitarian Advisory Group, estimate that approximately 15% of the population of PNG have a disability.⁵³ A report published by CBM also found that there are few organisations of people with disability, and 98% of persons with disabilities or people living with a disability do not have access to disability specific services.

People of Diverse SOGIESC

Social norms in PNG generally discourage divergence from the heteronormative gender binary. SOGIESC is an acronym for sexual orientation, gender identity, expression and sex characteristics.⁵⁴ People with diverse SOGIESC is an umbrella term for all people whose sexual orientations, gender identities, gender expressions and/or sex characteristics place them outside categories deemed culturally or socially normative, and is considered to more universally capture the diversity of experience than other terms, such as LGBTQIA+, which are generally considered western labels.⁵⁵ In PNG, there are no laws protecting the rights of people with diverse SOGIESC, and same sex activity between men has been illegal under PNG's Criminal Code since it was introduced into the penal code during the colonial period.⁵⁶ The criminalisation of same-sex sexual relations has led to "widespread social discrimination and stigmatization."⁵⁷

There are challenges in implementing activities that are inclusive of people with diverse SOGIESC, such as collecting disaggregated data that relates to SOGIESC categories, as there is a misconception that the rights of people with diverse SOGIESC are a foreign concept imposed by Western nations, and attempts by development partners to support the rights of the diverse SOGIESC community have been criticised as an intrusion on PNG's sovereignty.⁵⁸ Counter to this, some Pasifika LGBTIQ+ community members note that before Western ideas were introduced and enforced through colonial rule, many Pacific cultures embraced diverse sexualities.⁵⁹ It is largely recognized that the cultural

⁵¹ CBM, 2017

⁵² WHO, 2024b

⁵³ Coussy, 2023

⁵⁴ Nolan, 2016

⁵⁵ Smith, 2023

⁵⁶ Human Dignity Trust, 2024

⁵⁷ Kaleidoscope, 2021

⁵⁸ Role et al., 2016

⁵⁹ Blake, 2022

milieu of the Pacific region prior to colonization and evangelism held a fluidity regarding gender and sexuality that has been replaced by the strict binary and patriarchal patterns of European norms.⁶⁰ Colonisation in the Pacific brought with it a stigmatization and criminalization of diverse Pacific Indigenous gender identities, expressions, and sexualities, that can still be felt across the region. The most explicit impact of colonisation for this community in PNG is sodomy laws and the absence of legislation providing legal gender recognition for transgender or intersex individuals.⁶¹ There is no data that specifically addresses the intersection of people with diverse SOGIESC and VBD risk in the Pacific context, however, there are numerous studies underscoring the additional barriers to accessing healthcare faced by some people with diverse SOGIESC as a result of the stigmatization and social isolation experienced by some.⁶²

There are several organisations, such as Kapul Champions, that work closely with the Department of Health and other health service providers that advocate for rights and access to services for people of diverse SOGIESC under the umbrella of Key Populations Advocacy Consortium (KPAC).

Geographic Risk and Rurality

Geographic location can affect malaria risk. A study by PNGIMR showed that, overall, 35.7% of the PNG population lives in places at high or moderate risk of malaria.⁶³ In five provinces, relatively large proportions of populations (> 50%) inhabit high-risk areas: New Ireland, East and West New Britain, Sandaun and Milne Bay. While there is a contrast in malaria risk between coastal and inland areas, primarily influenced by altitude, the risk is highly variable in low-lying areas. Climate change presents an emerging threat with changing temperatures leading to the risk of malaria increasing, particularly in higher altitude areas where populations have had limited exposure such as in the highlands.⁶⁴ Tribal / Indigenous populations and rural and remote communities may face difficulties accessing malaria prevention tools, such as ITNs, or have difficulty engaging with malaria communication and prevention materials due to lower levels of literacy or differences in language and dialect.⁶⁵

Mobile Populations

Mobile populations may include displaced persons, migrant workers, outdoor workers (such as miners, forest workers) and sex workers. These subpopulations have some

⁶⁰ Ravulo 2021; Dvorak, 2014; Presterudstuen 2019; Schoeffel, 2014

⁶¹ Ravulo et al, 2024

⁶² Peni & Leach 2023; Kelly-Hanku et al., 2020

⁶³ Seidahmed et al., 2022

⁶⁴ Park et al, 2016

⁶⁵ Asia Pacific Leaders Malaria Alliance, 2022

commonalities in their risk factors that stem from being hard-to-reach. However, each of these groups also faces unique barriers to accessing VBD screening, diagnosis and treatment that could require tailored interventions.

Migrants and Internally Displaced People

Migrants and internally displaced people can face additional risks of contracting malaria. The NATNAT Acceptability Report notes that internal migrants who move from the highlands to the coastal regions, due to work in the logging industries or the betel nut trade, are at high risk. This is because they are often moving from an area with low malaria exposure to an area with high malaria exposure and therefore have lower acquired immunity to malaria parasites. Additionally, they may not be in the habit of utilising conventional vector control tools, such as insecticide treated bed nets (ITNs) or mosquito coils. Additionally, those internal migrants who are forcibly displaced due to conflict, violence or natural disasters are often unable to migrate with all their possessions and therefore have reduced access to preventative vector-control tools such as mosquito nets, disruptions to access to healthcare and a lack of documentation to access healthcare.

The international border region between the Papua New Guinean Provinces of Western Province & West Sepik Province, and the Indonesian Province of Papua, is relatively permeable, giving rise to complex population movements which has been the conduit for several infectious disease outbreaks, including malaria outbreaks.⁶⁶ Although there is limited research into this border and its role in health security, existing evidence suggests that these movement patterns present significant VBD risks for communities within the region, including those who may attend STRIVE sentinel sites in Baro and Kiunga.

Outdoor Workers

Specific risk factors of outdoor workers such as forest workers can arise from their remote work in VBD high transmission risk locations, occupational risks, seasonal nature of their work and exposure to vectors, among others.⁶⁷

Sex Workers

Sex workers are at higher risk of vector-borne disease exposure as they often do not have stable housing, are considered a highly mobile population, and sometimes sleep on the streets.⁶⁸ Sex workers are often neglected, live in temporary accommodation and are out of reach of regular information campaigns and vector control tools such as insecticide treated bed nets (also called LLINs). One interview participant in the NATNAT health

⁶⁶ Burnet Institute, 2021

⁶⁷ APLMA, 2024

⁶⁸ Manuv et al, 2021

system acceptability survey made a comment regarding the often unstable living situation faced by sex workers and the barriers this may create in accessing resources: “*how would you expect them to use LLINs*”?⁶⁹ This comment reflects one worker in the health system’s assessment of the potential difficulty faced by sex workers in accessing LLINs. KPAC continues to provide support in advocating for the rights and access to services for sex workers of all genders, and this could be a potential area for VBD programs to seek collaboration, to ensure that VBD research efforts reach sex workers.

Access to VBD Services, Resources and Healthcare

Barriers to Healthcare

There are a variety of barriers to accessing healthcare in PNG, which are compounded by various forms of inequality, marginalization and discrimination. Both the STRIVE health facility assessment endline report and the NATNAT acceptability study identified transport costs, the need to walk long distances to access health facilities, the cost of medications, the closure of aid posts and health posts, and frequent stockouts of medication as barriers for all groups to access vector-borne disease health services, with some groups more likely to face these barriers or more likely to face compounded barriers to healthcare access.

Health Seeking Attitudes and Behaviours

PNGIMR’s Matchbox study noted that there was a tendency to delay seeking treatment at a health facility across all population groups.⁷⁰ This delay in seeking treatment was also found in a NATNAT acceptability focus group.⁷¹ One female participant from Megiar told NATNAT qualitative researchers “most people get steam with herbs like pawpaw leaf and after that, they go for medical treatment.” The Matchbox study also noted a variety of beliefs about how people contract malaria. Some people believed it can be hard to tell whether it was black magic (*sanguma*) or malaria. The study found that some people “will tend to believe doctors if they were told this woman died of malaria not sanguma.” However, in addition to this general tendency to delay seeking treatment found across all population groups, there are also specific factors which affect access to healthcare across different population groups.

⁶⁹ Ibid.

⁷⁰ New Guinea Institute of Medical Research, 2021

⁷¹ Manuv et al, 2021

Barriers for Women and Gender Minorities

Women and girls in PNG face significant barriers to accessing health services, which include structural, financial and socio-cultural barriers.⁷² Women's employment, education, media exposure, distance to health facility, household wealth, region, residence and parity are determinants in the use of health services.⁷³ One gender analysis of immunization programs in Asia-Pacific found that women are less engaged in making healthcare decisions because of limited household decision-making power.⁷⁴ This analysis also found that women's traditional roles within the household, including being the primary caregivers and bearing responsibility for growing and gathering food, can mean that visits to health clinics are not supported by family members, and women may be reluctant to give up income-earning opportunities to go to a clinic. Women and gender-diverse groups are also often at risk of sexual harassment and other forms of GBV when travelling to health clinics.⁷⁵ Girls aged 15–19 years face additional barriers; they are likely to be school students, unmarried, or possibly unemployed and dependent on their parents or guardians, and thus less able to freely access healthcare.⁷⁶ Social norms which place responsibility on men to provide economic stability to a family were found to make men more reluctant to seek testing or treatment.⁷⁷

Barriers for People with Diverse Sexual Orientations, Gender Identity and Expression, and Sex Characteristics

People with diverse SOGIESC may face additional barriers accessing healthcare. According to a regional report on transgender and gender diverse people in Fiji, Samoa and Papua New Guinea, at least 30% of people with diverse gender identity or expression in PNG had experienced harassment at the hands of the police, due to their gender identity, potentially leading to mistrust of public systems.⁷⁸ People of diverse SOGIESC in PNG also experience discrimination, exclusion and bias when accessing health services, and report being refused treatment at health services.⁷⁹ Such discrimination, exclusion and bias can exacerbate the aforementioned general tendency to delay seeking medical attention for malaria or other VBDs.

⁷² Seidu et al, 2021

⁷³ Li et al, 2023

⁷⁴ Australian Regional Immunisation Alliance (ARIA), 2023

⁷⁵ Ibid.

⁷⁶ Seidu et al, 2021

⁷⁷ Manuv et al, 2021

⁷⁸ Fisk, 2022

⁷⁹ Kaleidoscope, 2021

Barriers for People Living with a Disability

The DFAT Papua New Guinea-Australia Transition to Health (PATH) report identified one of the key barriers to healthcare provision for people with disabilities was the physical inaccessibility of health facilities.⁸⁰ The STRIVE project operates out of Provincial Health Authority and Catholic Health Service facilities and may be able to analyse the accessibility of the sentinel sites involved and provide recommendations to local decision-makers. People, especially women, older people, and people who live with disability face further difficulties in accessing health services during intercommunal or intrafamily violence, as pointed out by the Matchbox study.⁸¹ Tony, a 42-year-old man, a displaced migrant in the Eastern Highlands Province, told PNGIMR researchers in reference to a person with disability in his community “sometimes, there are conflicts within the family and within the clan members, so it’s hard for one to come and report to take him/her. And also, someone knows what kind of sickness this man or woman has, but because there was a conflict between them, then he/she is reluctant to come and help. And that’s why, they stay like that and are facing problems, and sometimes they suffer.” (Pronouns have been referred to as he/she in the study to provide anonymity). This comment indicates that when conflict arises, the health needs of people with disabilities can be deprioritised, or intercommunal conflict may result in usual systems of care being disrupted.

Provincial Health Authority policy staff interviewed for the NATNAT Baseline Acceptability report said health workers struggled to reach people living with disability, and that awareness campaigns were not specifically targeted towards people living with a disability. The STRIVE health facility assessment endline report also noted gaps in disability inclusive community engagement and health promotion. STRIVE project staff recommended that health staff integrate health promotion for people with disability within daily operations to increase the knowledge and understanding of disease and prevention within the community.

Compounded Barriers for People with Specific Risk

Community members who are marginalised and face broader discrimination and lack of access to resources also face compounded barriers to seeking and accessing health services. According to the Matchbox Study, People Living with HIV, Female Sex Workers and Transgender women report barriers to accessing health services without discrimination or stigma and being given appropriate and considered treatment.⁸²

⁸⁰ PATH and NdoH, 2021.

⁸¹ PNGIMR, 2021

⁸² Ibid.

Migrant workers living far away from a health facility require considerable time and funds to seek testing and treatment and may choose to forgo healthcare for work opportunities. A logger and migrant worker told the Matchbox study researchers “there are no programs of the Health Department such as, the malaria program that goes around to serve the people around here or the workers here and even currently, there’s still none. When people contract a disease, they normally go to town (Kiunga) to get the treatment. But out here, there’s no [health] service for the people.”

Likewise, people living in rural and remote areas may struggle to access diagnosis and treatment; distance to the nearest health facility has been reported as a factor in whether formal treatment is sought for suspected malaria.⁸³ Although there is a dearth of research on the intersection of disability and rurality in PNG, data from other contexts suggest that in rural areas disability is more prevalent and services for people with disabilities are extremely limited, compounding barriers to healthcare for people with disabilities living in rural areas.⁸⁴

Gender-Based Violence and Healthcare

In addition to impacting individual women’s capacity to access healthcare, GBV impacts the health workforce and women’s leadership in the health workforce, thereby impacting the delivery of health services. In the DFAT-funded GEDSI stocktake for the PATH project, all participants identified gender-based violence as having an impact on the health workforce in various ways.⁸⁵ GBV was unanimously identified among respondents as a widespread issue that impacts women’s leadership potential and career advancement within the public service, as well as productivity, mental health, absenteeism and presenteeism, and issues accessing sick leave.⁸⁶ Another report, authored by the International Finance Corporation & Business Coalition for Women, made several key recommendations such as implementing policies, procedures, and training to respond to family and sexual violence and provide assistance to employees.⁸⁶

Community Leadership

Local leadership can also play a significant role in reducing malaria prevalence within a community, especially when community leaders take an inclusive approach that actively seeks out perspectives of all community members including women, people with a disability, older persons and other socially marginalised groups. A female participant in the NATNAT Acceptability Report recognised the need for leadership in her village to ensure

⁸³ Cleary et al, 2021

⁸⁴ USAID, 2018

⁸⁵ PATH and NdoH, 2021

⁸⁶ International Finance Corporation & Business Coalition for Women, 2021

environmental management techniques were used, commenting “now the leadership we have in the community looking a few years back was okay, the leader organizes the people to do vegetation clearance and toilets but now the leaders are not doing such vegetation cleanups. If you do cleanups, you are safe and those who do not are creating a breeding place for mosquitoes, and this is how we live. If you clean up, you are okay.” Although communities have the skills and knowledge to implement environmental management techniques, this participant’s quote reflects that sometimes environmental management techniques may be de-prioritised by leaders, or that communities might lack the inclusive leadership needed for implementation.

6. Vanuatu and Solomon Islands Country Briefs

The following sections provide an overview of the GEDSI context in Vanuatu and Solomon Islands. This is limited by the scarcity of data on the intersection between VBDs and gender and disability. Additionally, much of the primary data used above was generated through the STRIVE and NATNAT projects, which have been operating for several years in PNG. There is no project data to draw upon for the following section, as activities in Vanuatu and Solomon Islands have not yet commenced. This reflects a key limitation of this analysis, as time and resource constraints did not allow for interviews of focus groups with healthcare workers and community members. Additionally, STRIVE’s engagement in Vanuatu and Solomon Islands will focus primarily on strengthening relationships with colleagues and government in the VBD prevention sector, rather than working at the community level. As such, the following sections provide an overview of GEDSI in the countries more broadly, not specifically in relation to VBDs.

7. Vanuatu GEDSI Brief

The STRIVE project will facilitate mutual capacity strengthening through knowledge exchange and training opportunities across the region, which will bring together key organisations and government partners involved in malaria and VBD control from Vanuatu.

Laws, policies, programmes, resource allocation and accountability mechanisms

The National Gender Equality Policy 2020-2030 has a focus on the realization of equal rights, opportunities, resources and rewards for women and girls, including access to healthcare.⁸⁷ The GEDSI Action Plan for Climate Information Services for Resilient

⁸⁷ Government of the Republic of Vanuatu, 2020

Development in Vanuatu (Van KIRAP) includes a focus on strengthening leadership capacity for women, people living with a disability, youth, and LGBTQI+ individuals. Vanuatu's National Disability Inclusive Development Policy 2018-2025 enables equitable participation in disability-inclusive development processes and outcomes for women and girls with disabilities of all ages, demonstrating a commitment to disability inclusion.

Gender Inequality and Gender Based Violence

There is significant gender disparity in Vanuatu. Girls experience significant educational barriers, resulting in poor health outcomes.⁸⁸ Vanuatu has one of the highest adolescent fertility rates among the Pacific islands at 63 births per 1,000 in women aged 15-19 years.⁸⁹ In adulthood, major decisions in the home are made by men, while women tend to make everyday decisions about the home and children, although women's decision-making power still remains limited.⁹⁰ Women are the primary caregivers for children, older persons and persons with disabilities and primarily responsible for food security, while they often do not play a role in community governance or senior leadership in private or public sectors.⁹¹

Women face multiple barriers to accessing health services, such as the geographic composition of Vanuatu, which includes multiple islands and vast distances, lack of infrastructure, equipment and qualified personnel, and experiences of violence while travelling.⁹² Additionally, gender norms and women's low status affect women's ability to make decisions over their own lives, particularly around sexual and reproductive health and family planning.⁹³

Women and girls in Vanuatu experience high rates of GBV. Sexual abuse perpetrated against girls is one of the highest in the world, with nearly 30% of women having had a forced sexual experience before the age of fifteen.⁹⁴ A recent study found that 60% of women have experienced physical and/or sexual violence by an intimate partner. The same study found that there is a high rate of acceptance for gender-based violence amongst both women and men, with 32% of survey respondents believing that a bride price was justification for physical violence in a marriage, and 53% of women in Vanuatu stating that they believe a woman becomes a man's property if a bride price is paid.⁹⁵ In

⁸⁸ UN Women, 2020

⁸⁹ World Bank, 2024

⁹⁰ CARE, 2020c

⁹¹ Ibid.

⁹² CARE, 2020c

⁹³ CARE, 2020c

⁹⁴ UN Women, 2022

⁹⁵ Vanuatu Women's Centre, 2011

this survey, when women chose to leave, more than half could not access enough money to feed or house themselves and their children.

People Living with a Disability

Approximately 13% of Vanuatu's total population is reported to have a disability.⁹⁶ Whilst Vanuatu has ratified the 2007 Convention on the Rights of Persons with Disabilities (CRPD), there are no specific legal protections for people with disabilities in Vanuatu. There is a significant causation between gender inequality and disability, with one in five (21%) women who have been injured due to GBV having sustained a permanent disability.⁹⁷ Women with disabilities face the intersection of gender discrimination and disability-based discrimination, resulting in significantly elevated risks of physical, emotional and sexual abuse, discrimination, and neglect.⁹⁸ For example, menstrual beliefs often lead to women isolating themselves or being isolated during menstruation, with a particularly negative impact on women with disability due to the physical barriers to accessing Water Sanitation and Hygiene they may experience (Govt Vanuatu, 2020). This highlights how the intersection of gender and disability can create additional barriers.

People of Diverse SOGIESC

In Vanuatu, there are no laws criminalizing consensual same-sex sexual conduct between adults. However, religion, patriarchal values and traditional binary gender roles foster negative attitudes towards people with diverse SOGIESC, with greater acceptance on the main islands of Efate and Espiritu Santo, compared to the smaller islands.⁹⁹ There is limited recognition of and protection for people with diverse SOGIESC in government policies¹⁰⁰ and people with diverse SOGIESC face high levels of sexual violence.¹⁰¹

In a recent study Commissioned by the Pacific Sexuality and Gender Diversity Network (PSGDN) when discussing government services, a Ni-Vanuatuan queer woman shared that “given the stance of a lot of public officials about queer people, I don’t think that they would be creating safe policies for queer people.”¹⁰² Additionally, there has been a recent backlash against the rights of people with diverse SOGIESC and their advocacy groups in Vanuatu. In April 2024, the Vanuatu Council of Ministers ruled that any advocacy, funding, projects or activities relating to LGBTQIA+ issues will be prohibited by the government,

⁹⁶ Vanuatu Department of Women’s Affairs, 2020

⁹⁷ Vanuatu Women’s Centre, 2011

⁹⁸ State Department, 2023

⁹⁹ Australian Volunteers, 2018

¹⁰⁰ UNFPA, 2021

¹⁰¹ van Gemert et al., 2013

¹⁰² Ravulo, et al. 2024

citing that these practices are in conflict with the country's Christian principles.¹⁰³ Further marginalisation and social isolation will exacerbate barriers to accessing prevention, diagnosis and treatment for VBDs.

Additional Barriers Resulting from Climate Change and Natural Disasters

There are numerous intersections between climate change, natural disasters, VBDs, and GEDSI. Vanuatu is considered one of the most vulnerable nations globally to the effects of climate change and natural disasters. It experiences frequent cyclones and heavy rainfall, alongside threats from volcanic eruptions, earthquakes, and tsunamis.¹⁰⁴ Additionally, research is emerging that highlights that changes in rates of vector-borne disease are often associated with changes in climate.¹⁰⁵

Women and people with disabilities face unique risks and challenges during climate emergencies. One study examined the effect of climate change on women and people with disabilities in Vanuatu, Solomon Islands and Fiji.¹⁰⁶ The study found that women and persons with disability are severely affected by climate change, particularly in regard to livelihoods and health, with the impacts of climate change and climate-related displacement increasing the barriers they face. For example, some respondents reported that women and people with disability often had difficulty accessing safe drinking water; for persons with physical disability, disruptions to clean water sources leaves them with very limited options and increases dependence on support networks. According to a Rapid Gender Analysis conducted in Vanuatu by CARE following Cyclone Harold, women's workloads are likely to increase during disasters as they are seen as responsible for food production, GBV is likely to increase, and maternal and reproductive health services are deprioritised.¹⁰⁷

Climate-induced disaster can cause displacement. Internal migrants and communities displaced by natural disaster are more vulnerable to adverse health outcomes, due to a lack of land security, lack of access to land for gardens, overcrowding, limited access to accessible and safe water and sanitation facilities, and unemployment.¹⁰⁸ It can be hypothesised that, similar to PNG, displacement may result in people losing access to VBD prevention tools, such as bed-nets, and may result in people losing access to healthcare due to closures of health services. One study examined the effect of climate

¹⁰³ Morris, 2024

¹⁰⁴ DFAT, 2024b

¹⁰⁵ Thomson et al, 2022).

¹⁰⁶ Fong, 2022

¹⁰⁷ CARE, 2020a

¹⁰⁸ CARE, 2020c

change on women and people with disabilities in Vanuatu, Solomon Islands and Fiji.¹⁰⁹ Although there has been very limited research on the intersection of VBD risk, VBD healthcare and climate emergencies in Vanuatu, it is likely that barriers to accessing healthcare during emergencies also impede on people's access to VBD diagnosis and treatment. These barriers are likely to be particularly pronounced for women, girls, people with diverse SOGIESC, people with disability, and other marginalised groups who, as outlined above, already face additional barriers to accessing health services.

8. Solomon Islands GEDSI Brief

Similar to Vanuatu, the STRIVE project will facilitate mutual capacity strengthening through knowledge exchange and training opportunities across the region, which will bring together key organisations and government partners involved in malaria and VBD control from Solomon Islands.

Laws, policies, programmes, resource allocation and accountability mechanisms

The Family Protection Act (FPA) criminalised domestic violence including physical, sexual, economic, and psychological abuse. This Act introduced police safety notices and protection orders to protect survivors of abuse.¹¹⁰ The Solomon Islands' National Policy to Eliminate Violence Against Women and Girls (EVAWG) 2021-2027 contains guiding principles to eliminate GBV, including: Zero tolerance for violence, Recognition of women's rights, Shared responsibility for eliminating violence against women, and achieving gender equality.¹¹¹

Gender Inequality and Gender Based Violence

There is significant gender disparity in the Solomon Islands. Women are constrained by the uneven division of domestic labour, poor numeracy and literacy skills, discrimination in the workplace, lack of access to government business services and information, lack of decision-making power, and limited access to financial services.¹¹² Schooling completion rates for both men and women are low, but significantly lower for women, with women more than twice as likely than men to have no schooling.¹¹³ Entrenched male dominance of state, faith-based and traditional institutions result in a situation where men often make decisions on behalf of women, and customary bride-price payments remain common and

¹⁰⁹ Fong, 2022

¹¹⁰ National Parliament of Solomon Islands, 2014

¹¹¹ Ministry for Women, Youth, Children and Family Affairs, 2016b

¹¹² Asian Development Bank, 2015

¹¹³ Ibid.

contribute to the perception of ownership of women by men.¹¹⁴ Solomon Islands also has one of the highest fertility rates globally, at 4.047 births per woman¹¹⁵, and highest rates of maternal mortality, at 122 deaths per 100,000 live births.¹¹⁶ Women face additional barriers to accessing health services, including heavy workloads at home, limited funds and social norms that place varying degrees of restrictions on women's movements outside the community.¹¹⁷ Rural women are more likely to face barriers to accessing health services: 30% of rural women reported they needed permission from their husbands or intimate partners to go to a health facility for treatment, compared with 17% of urban women.¹¹⁸

Violence against women is an epidemic in Solomon Islands. According to the Solomon Islands Family Health and Safety Study conducted in 2009, 64% of women between ages 15–49 who had ever been in an intimate relationship reported experiencing physical and/or sexual violence by an intimate partner.¹¹⁹ The same study found that 42% of women reported experiencing such violence in the previous twelve-month period of the study. There is a significant gap in data, however, as there do not appear to be updated figures since this 2009 study, and there may have been significant changes since then.

The malaria incidence rate was 247.85 per 1,000 population in 2019.¹²⁰ Sex-disaggregated data on communicable diseases is not publicly available, so it can be difficult to attribute differences in risk based on gender beyond those known in pregnancy. In general, women are more likely to seek healthcare compared to men in Solomon Islands. However GBV, limited control of financial resources, medication shortages and transportation issues from remote communities are key barriers to women accessing healthcare.¹²¹

People with a Disability

According to the 2020 Census, disability prevalence is 14 percent in the Solomon Islands, noting that this figure is likely to be an underrepresentation given challenges in reaching people with disability.¹²² Specific health services for pregnant women and people with disabilities or who are already mothers are uncommon and few service providers are trained to support those women with a disability, according to the Asia Development Bank's Gender Assessment.¹²³ This assessment also found that women and girls with

¹¹⁴ UN Women, 2022

¹¹⁵ MacroTrends, 2025

¹¹⁶ DFAT, 2020

¹¹⁷ Asian Development Bank, 2015

¹¹⁸ Ibid.

¹¹⁹ Ministry for Women, Youth, Children and Family Affairs (MWYCFA), 2016

¹²⁰ UN Women, 2022

¹²¹ Ibid

¹²² Asian Development Bank, 2015

¹²³ Ibid.

disabilities are discriminated against and young girls with disabilities are often hidden since disability is seen as a curse.¹²⁴

People of Diverse SOGIESC

Same-sex sexual activity for men and women is prohibited under the Penal Code of 1996, with a maximum penalty of fourteen years' imprisonment. However there have been no recent reports of arrests under this law since 2003, when a gay woman was arrested, according to a UK-based LGBT human rights group.¹²⁵ More recently, Solomon Islands' former Prime Minister Manasseh Sogavare called on Western nations, especially the United States, not to weaponize LGBT issues and use it as a condition for accessing aid.¹²⁶ In a recent paper exploring queer resilience in the Pacific, a gay man from Solomon Islands reflected that "[people in Solomon Islands] see LGBT people like, they are not human beings. They see them like they are garbage."¹²⁷ There are limited formal advocacy bodies within Solomon Islands as there is still too much stigma and opposition, particularly from church groups.

Additional Barriers Resulting from Climate Change and Natural Disasters

Solomon Islands is one of the most climate-vulnerable countries in the world, ranking 17th 'most vulnerable' but only 94th 'most ready' of 182 countries.¹²⁸ The country's topography and location within the Pacific's 'Ring of Fire' make Solomon Islands prone to earthquakes, tsunamis and landslides, and the country's heavy rainfall increases its vulnerability to natural disaster, particularly flooding. With most of Solomon Islands' population living in coastal regions, the impact of rising sea levels and flooding impacts most of the population.¹²⁹

Similar to PNG and Vanuatu, climate change can disrupt livelihoods, cause displacement and limit access to healthcare, exacerbating VBD risk and barriers to treatment for women and people with disabilities. The risks and barriers outlined in the Vanuatu section are also broadly applicable to the Solomon Islands context. One study specific to Solomon Islands highlights how people with disability are often left out of disaster management planning, and both government and aid organisations have poor understanding on the needs of people with disabilities in disasters (King, 2015). There has been very little research on the impact of climate change on VBDs in Solomon Islands, and no published research could be found on the intersection of VBDs, climate change, gender and disability in Solomon

¹²⁴ Ibid.

¹²⁵ Human Dignity Trust, 2024

¹²⁶ Rogers, 2023

¹²⁷ Ravulo, et al. 2024

¹²⁸ Water for Women, 2024

¹²⁹ Ibid.

Islands. By building networks between research organisations across Melanesia, STRIVE is positioned to increase the country's capacity to establish baseline studies or data in this area.

9. Project GEDSI Practices and Successes

STRIVE GEDSI Approaches

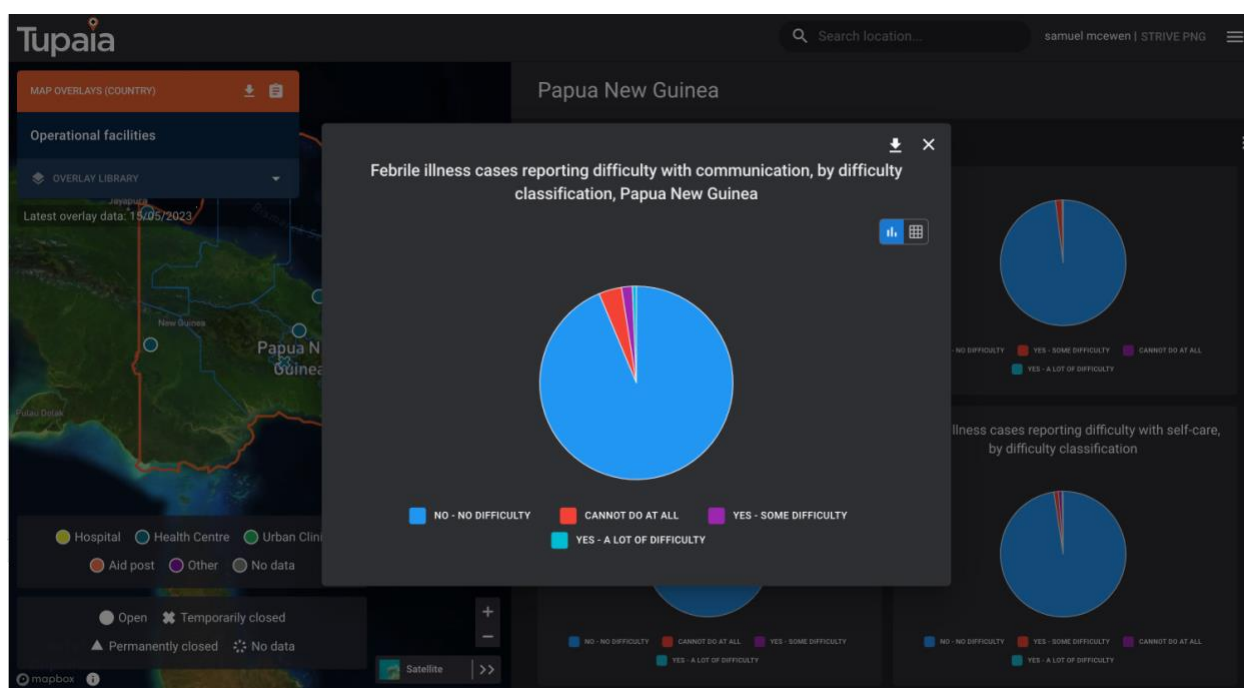
The STRIVE project strengthens health systems across Melanesia by supporting local partners to monitor and respond to VBDs. STRIVE project activities, research and data collection are informed by STRIVE's crosscutting goal to strengthen GEDSI considerations and activities throughout project outcomes. STRIVE Phase 1 (2018 – 2023) achieved several GEDSI targets and the project team aims to build on successful approaches in STRIVE Phase 2 (2024 – 2028).

GEDSI Data Collection

STRIVE Phase 1 established the regular collection and dissemination of disaggregated malaria data. Data includes malaria cases stratified by sex, age, pregnancy status for women, malaria diagnosis, and treatment in all eight of the health facilities involved in the project. These sites are spread across eight provinces: West Sepik, Morobe, National Capital District, New Ireland, Milne Bay, Madang, Simbu and Western Provinces.

In addition, staff ask patients at the health facilities about their gender. However, there have been very few responses to this question, with staff reporting that patients are often confused about the question. Given the stigma against gender diverse community members, it is understandable that patients may not feel safe to identify their gender as different from their sex at a point-of-care location. This question also may not be well understood by both staff and community, rendering the need for contextually specific training on gender identity and data collection. Additionally, this may require some critical reflection on whether this is an appropriate situation in which to ask this question.

STRIVE Phase 1 also established data collection on disability through the Washington Short Set of Questions, with translations in Tok Pisin available. By training staff in the use of these questions, it has allowed the STRIVE project to collect and disaggregate data on people living with a disability, with data going back to 2021. This allows health staff at the facility as well as district and provincial health partners to generate data on how many people presenting with febrile illness report as having a disability and what type, as per the example below.



In 2024, STRIVE also updated their procedures for conducting pre and post training surveys. In the pre-training surveys, there are opportunities to identify any accessibility requirements participants may have to attend the training and/or participate fully.

Disability Equity and Partnerships

In order to increase outreach to people living with disability, the STRIVE project partnered with two key services in PNG that support people living with a disability during its first project iteration: Callan Service in Kiunga and Cheshire Home in Port Moresby. This partnership aimed to ensure participants living with a disability are provided the opportunity to be screened and treated for VBDs and to increase representation for those living with a disability in the surveillance data being generated. This included scheduling a day each week to undertake the recruitment of participants at the two locations. Whilst this has been advantageous to the project, it has also supported these specific services with malaria diagnosis and case management, awareness and VBD control, ultimately reducing the burden of malaria in these two key locations.

Supporting disability equity by engaging with disability services and routinely collecting data on disability will provide the STRIVE team with an opportunity to inform decision makers on potential barriers for healthcare access for people with disability. The data could provide opportunities for sentinel sites with low uptake of services by people living with disability, or the provision of data on different types of disability, to understand how they might better engage with this cohort. For sentinel sites or provinces which have

uptake of services by people living with disability, the data could be used to develop case studies and further explore what these health facilities are doing well to engage people with disabilities.

GEDSI Dashboard

The data collected through STRIVE is uploaded and visualised on the Tupaia platform. This allows data to be visualised on a map, in reports, and through a variety of dashboards which can be modified to the user’s needs. STRIVE has developed a specific GEDSI dashboard, launched in June of 2024, which enables quick access to data disaggregated by sex, gender, disability, age group, and pregnancy status. STRIVE intends to integrate the use of this dashboard into future data for decision making workshops and stakeholder consultations to ensure a GEDSI lens is applied to the development of workplans, policies, and Standard Operating Procedures.

Data extractions from Tupaia’s GEDSI dashboard shows that the representation of female versus male patients across the 8 sites is relatively equal, as per below. Similarly, the number of women testing positive for malaria with a rapid diagnostic test (RDT) is also approximately equal. The low percentage of pregnant females with febrile illness is likely due to the fact that the STRIVE sentinel sites are not antenatal clinics.

Percent of female febrile illness cases	50.7%
Percent of females testing positive with RDT	51.8%
Percent of pregnant females with febrile illness	2.5%

In 2023, the following data was collected at the 8 sentinel sites by asking participants who presented to clinics with a febrile illness the set of questions outlined in the Washington Short Set. Interestingly the total percentage of people recorded as living with a disability was 18.3%, which is higher than current estimates of between 10% and 16%. Also of interest is that a significant percentage of people living with disability identified difficulties in communicating, with over 6% nominating communication as an issue.

Type of disability	Total of people who have varying degrees of disability	Percentage of total screened
Sight	235/ 5879	4%
Hearing	117/5878	2%

Mobility	126/5874	2%
Cognition	94/5864	1.6%
Self-care	145/5872	2.5%
Communication	363/5858	6.2%

Project Leadership and Representation

In addition, the STRIVE project has gender targets to promote female participation, development and leadership within the project. There remains a relatively equal gender balance amongst the project staff; Program Directors (4 female/5 male), steering committee (2 female / 2 male), Technical Leads & Expert Advisors (8 female/9 male), Project Partnership Team (4 female /1 male), sentinel site staff (7 female/5 male), molecular hub team (8 female / 1 male) and Research Officers (8 female/ 6 male). This overall gender balance in the STRIVE project team is 41 women and 29 men, with a relative gender balance in senior leadership positions. Given that according to the PATH GEDSI stocktake 54% of national health staff are women, and 31% of health managers are women, then the percentage of female staff employed in the STRIVE project compare favourably.

The STRIVE team also incorporates GEDSI considerations into training, tracking the breakdown of male and female training participants and analysing levels of confidence in various data collection activities by gender. In June 2024, the STRIVE team conducted clinical refresher training with sentinel site nurses on the sentinel sample collection process. Although it was a very small sample of participants (6 female, 6 male) who completed both pre and post training, the results showed that before the training, female staff were slightly less confident than male staff in almost all areas. However, after the training, this trend reversed: all female staff were more confident than male staff in all areas except one.

NATNAT GEDSI Approaches

As described above, the NATNAT project will capitalise on the investment in infrastructure, capacity building, stakeholder relationships and network formation undertaken during the first phase of NATNAT to continue to investigate the effectiveness and community acceptability of new Vector Controls Tools (VCTs), with a stronger focus on spatial emanators during the second phase of NATNAT. The effectiveness of the tools will be investigated in lab, semi-field and field conditions. These include spatial emanators,

residual spraying, and larviciding. NATNAT Phase 1 (2020-2023) achieved a number of GEDSI milestones, which NATNAT Phase 2 (2024 – 2028) will build upon.

The NATNAT team continues to bring to bear considerable effort to ensure the employment benefits derived from community-based activities were evenly distributed between all genders. The NATNAT team made efforts to improve the gender breakdown of community members engaged in the programmatic IRS pilot in New Ireland with 15 female and 33 male community members participating in paid roles. Further work is needed in this area to ensure that all roles, not just lower paid roles, within an IRS campaign are equitably distributed, despite socio-historical norms skewing recruitment of spray operators towards men. The NATNAT project should continue to build upon its preliminary work in this area by incorporating lessons learnt from PMI's work and research on Empowering women and promoting equity in Malaria prevention in East Africa.¹³⁰

GEDSI Data Collection

The project is conducting community wide household surveys, which will include information on the number of people in the family, their age, gender, the type of house they live in, education level, ownership and use of long-lasting insecticide treated bed nets (LLINs), health seeking and treatment behaviour, and disability status. This will provide a rich source of data around women and people living with disability and their responses to the different VCTs. In addition, the project has conducted qualitative focus group discussions, which has included women, men, community leaders to research their views on the different VCTs. In all data collection activities, NATNAT aims for a gender balance between recruited participants for in-depth interviews. This is to ensure the insights generated are representative of the community and provide a space to highlight barriers, bottlenecks and suggestions that may not be communicated by the other gender. Focus Group Discussions have been conducted with men and women separately. This has allowed the project team to examine how women and men perceive, accept and use vector control tools, to inform advocacy to garner support, and to drive implementation and roll-out of VCTs. Results from North-coast Indoor Residual Spraying (IRS) study are due to be published in Q1 2025. These results will be disaggregated by gender.

These surveys also provided some insights into potential areas of development within the GEDSI space. For example, these surveys revealed that during NATNAT 1, the responsibility for deciding if a household consented to IRS sat with the 'head of household', often a man, which potentially excluded the voices of women/minority genders and risked entrenching power dynamics. Finally, while most interview and FGD participants were appreciative of the community awareness sessions conducted by the NATNAT team, one interviewee

¹³⁰ President's Malaria Initiative, 2022

noted that women and some older community members faced difficulty accessing the sessions due to their timing in the evening. These insights from interviews and FGDs could be incorporated into planning for future research on VCTs by the NATNAT team.

Given that pregnant women and people, migrants, young boys and people living with disability face particular risks in relation to malaria transmission and access to vector control tools, these cohorts could be deliberately and intentionally recruited in any future focus groups discussing VCTs, and their responses analysed separately from other participants. NATNAT Principal Investigators and qualitative researchers could also consider conducting specific focus groups or interviews for some or all of these groups to generate a deeper understanding of the views, perceptions and barriers to VCT access, acceptability and usage. Such an analysis could then inform any behaviour change communication (BCC) strategies for these VCTS and generally inform malaria prevention and VCT usage behaviour change campaigns.

Disability Access

As noted, NATNAT disaggregates epidemiology data by disability status in order to identify specific barriers which prevent people with disability from engaging with new VCT. The NATNAT team has maintained its engagement with disability advocacy organisations, Callan Services (since 2021) and the Creative Self-Help Centre; a Madang-based organisations that PNGIMR has had a long-standing relationship with over many years. Representatives from the Creative Self-Help Centre were invited to attend the PNGIMR Belna Natnat Mosquito Research Facility Official opening in March 2023.

NATNAT conducted a disability audit of building plans for insectary and multi-purpose office building, resulting in alterations to design of insectary building to make toilets more accessible (handle height, direct of door swing and width of cubicles) and the installation of an accessibility ramp to plans for the double-story multi-purpose office building. These alterations to construction plans will reduce accessibility barriers for partners and employees who use a wheelchair or other mobility aids. The double story accessibility ramp when combined with appropriate trolleys may also contribute to reduced OHS-related workplace injury and disability. Conducting the accessibility audit before building plans were finalised was also more cost-effective than retrofitting or modifying buildings after construction has been completed.

During the implementation research study of IRS in four north-coast villages in Madang province, the NATNAT team invested significant time and resources in ensuring that communication materials that were widely disseminated were as accessible as possible. Pictural pamphlets were produced (see Annex 1) to support information to be accessible and comprehensible to people of all ages, reading ability and hearing ability. These

pamphlets were also used by IRS team and PNGIMR researchers to explain the IRS intervention to households as they moved from house to house. They were also used as a guide by project staff at in-person community engagement events or 'tok save' that were conducted at schools, churches, markets and other central meeting places in villages.

Project Leadership and Representation

NATNAT aims to maintain relative gender balance at all levels within the project team. This includes Principal Investigators (2 female / 3 male), associate investigators and technical partners (7 female / 11 male), project partnership team (4 female / 1 male) and research officers (10 female / 7 male). Senior leadership at the Principal Investigator level is 40% female. The lowest proportion of women can be found at the associate investigator and technical partner level with 38% female representation; NATNAT 2 will focus on raising this proportion to above 40%.

Another component of the NATNAT project is supporting emerging female researchers, which will contribute to the female research workforce, and to the capacity of entomological research within PNG. Two senior researchers in the entomology unit have been supported by the NATNAT project to undertake their PhDs, one is conducting evaluations of spatial repellents and the other focusing on the impact of VCTs on vector ecology in PNG.

Women have been recruited as paid residual spray operators, thus providing opportunities for them to be remunerated and gain employment skills along with male spray operators. These women were identified and nominated by community leaders in the same way as their male counterparts, aligned to the 'do no harm approach' taken by the NATNAT team.

ADVANCE GEDSI Approaches

ADVANCE is a research-focused project aiming to improve access to diagnostic solutions that improve malaria case detection, ensure access to the best treatment options, and reduce the malaria burden in difficult-to-reach communities. ADVANCE is in the contracting phase, and project activities have not commenced; therefore, there have not yet been any GEDSI activities implemented.

Current rapid diagnostic tests (RDTs) have limited sensitivity, particularly for *P. vivax* and may not detect malaria in those with low-density infections, including pregnant women and people. ADVANCE will test new RDTs with improved sensitivity to detect malaria parasites within communities and at selected health facilities. Given these sites currently have a 50% presentation of females, a wide age range, including women of child-bearing

age, the project offers the opportunity to use these tests with pregnant women and people, and those with immunodeficiencies. This project could increase the detection of malaria in groups that have been previously less accurately diagnosed, thus increasing the confidence of pregnant women and people and immunodeficient individuals to engage with health clinics. It could also have significant impact in improving infant and maternal health, due to reducing the risk of low birth weight, premature births, miscarriage or even death that are associated with malaria in pregnancy.

Moreover, given that ADVANCE is conducting both testing at health facilities and in the community, ADVANCE may be able to identify gaps in health clinic outreach and access. For example, if a certain demographic is underrepresented in health facility diagnoses but overrepresented in community diagnoses, it may indicate a need to further examine barriers to health clinic access and services.

As a consortium, ADVANCE in Laos and Philippines is examining G6PD deficiency disaggregated by sex. G6PD (Glucose-6-Phosphate Dehydrogenase) is an enzyme that protects red blood cells and prevents them from breaking down when exposed to certain triggers. People who are G6PD deficient are defined as having lower than 4 units of G6PD enzyme activity per gram of Haemoglobin. G6PD deficiency is an X-linked recessive genetic condition, thereby affecting more males than females. Males can have deficient or normal level of G6PD activity and females can have deficient, intermediate or normal G6PD activity. G6PD deficiency doesn't ordinarily cause symptoms until exposed to certain triggers, such as specific foods, chemicals and medicines. One medicine that can cause an adverse reaction is primaquine, which is used to treat vivax malaria in many countries and is more effective in higher dosages.¹³¹ The ADVANCE consortium will provide data on the sex disaggregation of G6PD deficiency in nearby Pacific countries, potentially guiding policy and malaria elimination strategies in the region.

Central to each of the workstreams of ADVANCE is the partnership's commitment to a mainstreaming gender approach, ensuring that gender equality is integrated into all project activities. At the commencement of the project, an equity benchmarking assessment was conducted with all consortium partners. This assessment described how the project will work towards the following strategic priorities of PATH: 1. Equity in health, 2. Community priorities, 3. Respectful partnerships, 4. Inclusive innovation. This assessment will be revisited as a routine part of the project monitoring and evaluation.

Given the critical need to include marginalised populations in malaria control efforts, a dedicated research agenda is being established to ensure gender equity, disability, and

¹³¹ Johns Hopkins Medicine, 2025

social inclusion underpin the workplans of the project. The research agenda will seek to challenge assumptions and knowledge gaps on critical risks that undermine achieving equitable access to the products.

10. Recommendations

The following recommendations are made to engage a twin track approach for better GEDSI outcomes by all contracted project partners. This involves mainstreaming and integrating GEDSI across all project activities and operations – including partnerships’ ways of working through amendments to the Partnership Agreement – as well as specific interventions to improve access and representation.

All Projects

GEDSI Guidance and Governance Recommendations

- Burnet Institute to undertake a review of project partner GEDSI approaches and policies, to identify policy gaps and support organisations to have robust and fit-for-purpose GEDSI approaches and policies.
- Establish a mechanism (for example, an annual meeting, a report, a newsletter) to provide advice and guidance to project partners on: equal opportunities for professional development and career advancement for everyone working on VBD projects; sexual harassment; maternity protection; return to work pathways; and reasonable accommodations to improve inclusion practices within services and projects.
- Produce guidance for project partners on how to strengthen disability equity and inclusion data collection for all VBD activities. These projects have an opportunity to generate and share data from the activities they support, and to make innovative and important contributions to the evidence base on disability equity and inclusion considerations in VBD projects across the Pacific. This should include information on the use of contextually tailored tools, such as Washington Group Questions, and how data can support decision-making, as well as guidelines around qualitative disability equity and inclusion data collection, including participatory techniques to generate evidence on barriers to VBD activities.

GEDSI Data Utilisation and Information Accessibility Recommendations

- Ensure STRIVE, NATNAT and ADVANCE partners to support training for gender-sensitive data sampling and collection methods, including enhancing existing data disaggregation processes.
- In line with the Burnet Disability Action Plan, ensure that the VBD project website is accessible so that knowledge products can be used by researchers with various accessibility requirements who wish to connect with project work. An analysis of the Burnet website (Mid 2024) against the Web Content Accessibility Guidelines 2.1 level AA success criteria found that it was non-compliant, and partially inaccessible to those using screen readers, those requiring keyboard navigation adjustments, and design and readability adjustments (for the vision impaired).
- Build an effective project feedback mechanism for internal project staff and community members that incorporates disability and accessibility-related enquiries and a feedback/complaint mechanism that is accessible in accordance with the Burnet Disability Action Plan.
- Engage with OPDs alongside the health sector to encourage the utilisation of available GEDSI data for advocacy, health community, and service delivery materials.
- Improve effectiveness of surveillance, detection, and prevention, by continuing to ensure that program delivery strategies and budgets include accessible and participatory processes so that diverse people from under-represented groups are actively supported to be involved and intentionally invited to participate.
- Work closely with program partners to promote gender and disability training within their teams. Implement a training needs assessment regarding gender equality and disability knowledge amongst project staff and develop a plan to address GEDSI gaps, engaging representative organisations wherever possible.
- Ensure that any training for in-country HCWs addresses disability inclusion and partner with people with disabilities and OPDs to deliver training on disability inclusion. Further to this, ensure that training is accessible and recognises and challenges stereotypes. Data collection training project should continue to include collecting and analysing disability data using best practice approaches such as the Washington Group Questions.

GEDSI Reporting and Monitoring Recommendations

- Amend reporting templates (for example, the STRIVE Annual Stakeholder Report) to include GEDSI impacts and outcomes: positive, negative, neutral and unintended, recognising that the needs, constraints, roles and responsibilities of people of different genders create different risks, and that communication and mitigation strategies must take these differences into account.

Addressing Barriers for Specific Risk Groups Recommendations

- Continue to embed gender-inclusivity in design and implementation including:
 - During workshops, facilitation of group discussions on GEDSI to enable conversations on sensitive topics in a culturally appropriate manner.
 - Consideration of the impact of gender in routine clinical patient care. This includes consideration of family planning e.g. potential drug interactions between VBD treatment and contraception (captured in project SOPs), with referral to family planning services (MSI) where appropriate. Pregnancy also remains a key consideration in VDB screening, disease, and treatment.
 - Maintaining gender inclusive recruitment practices as part of routine HR processes including gender representative interview panel and the offering of special considerations as required.
 - Equal representation of genders included in the TORs and recruitment processes for representative groups.
 - Qualitative analysis and exploration of knowledge, perceptions and beliefs about climate change and VBD in one matrilineal and one patrilineal community in PNG.
- Implement measures to address GBV and safeguarding including:
 - Project partners provide safeguarding training to all staff to provide participants with an understanding of child protection, identifying forms of child safeguarding concerns and sexual exploitation, abuse and harassment, and provide them with confidence to address safeguarding matters within the workplace and community in safe and culturally appropriate ways.
 - Develop and resource a GBV plan that strengthens staff knowledge of referral pathways and provides project leadership and staff with an understanding of the impact of GBV. This may include partnering with a GBV-focused organisation and leveraging existing resources.
 - Establish Safeguarding Focal Points in key project locations. Provide focal points with Safeguarding training and GBV training.

- Assess how projects can shift from a ‘disability inclusion’ framework to a ‘disability equity and rights’ framework, integrating project activities which go beyond facilitating inclusion and work to pursue outcomes that remove barriers.
- Partner with an OPD to provide sign language training to patient-facing staff to ensure accessible communication to Deaf and hard of hearing people.
- Strengthen partnerships with OPDs to co-design project activities which address discrimination and exclusion of people with disability, and barriers to health provision.

STRIVE

- The STRIVE project should develop behaviour change communications (BCC) campaigns co-designed and tested with marginalised and high-risk groups. Participants should include:
 - Women
 - People living with disability
 - Women living with disability
 - Migrants and refugees who have migrated for work, or due to conflict or natural disasters
 - Men and boys, particularly those who spend evenings working outside
 - Sex workers
 - People of diverse SOGIESC, ensuring to take a ‘do-no-harm’ and culturally sensitive approach to engaging with this community.
- The STRIVE project should consider partnering with women’s groups or theatre groups, such as Wan Smolbag, as part of BCC campaigns to raise awareness of febrile illnesses and malaria, and increase health-seeking particularly for pregnant women, rural women, and women living with disabilities, or women experiencing multiple disadvantages, such as living with a disability and living in a rural location.
- The STRIVE project across all three countries could provide training and support for female researchers and staff to promote female leadership, with an emphasis on the importance of female leadership for improving the delivery of health services.
- The STRIVE project could consider introducing GEDSI focal points who would focus on implementing the GEDSI strategy and ensuring MEL targets are met.

NATNAT

- The NATNAT project could consider more targeted acceptability or qualitative research to understand the perceptions and access to VCTs of the following groups:

- Pregnant women and people
- People, especially women, living with disability
- Migrants and refugees who have migrated for work, or due to conflict or natural disasters
- Men and young men and boys, who spend evenings working outside
- Sex workers
- People of diverse SOGIESC
- This more targeted research could take the form of either conducting separate specific focus groups or undertaking separate GEDSI-focused analysis of the responses of the following groups in existing qualitative data, to understand their perception and access to new VCTs. If additional data collection is chosen the NATNAT project should take a ‘do-no-harm’ and culturally sensitive approach to engaging with these communities.
- When developing VCT-focused IEC/BCC campaigns and materials, the NATNAT project should engage with the aforementioned target communities in the development and user-testing of any materials.
- The NATNAT project should continue to encourage and resource the training and development of female researchers and project staff. The project could consider targeted ways this professional development resourcing could extend to project team members with a disability or other potential barriers to career advancement and learning.

ADVANCE

- Draw upon the WHO Guidance for Best Practice for Clinical Trials to ensure that the ADVANCE clinical studies promote equitable representation among participants, to ensure assessment of RDTs is applicable to population groups who may be traditionally underrepresented.
- Consider conducting screening at antenatal care facilities to assess a larger cohort of pregnant women and people and/or ensuring community-based screening conducted for this study targets pregnant women and people during outreach.
- Develop behaviour change communications (BCC) materials which raise awareness among pregnant women and people of the increased health risks of malaria during pregnancy, and the importance of seeking care.

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Annex 1: NATNAT Indoor Residual Spraying IEC/BCC

