Mid Term Review of Papua New Guinea HIV Strategy (2011-2015)

Peter Godwin and the Mid Term Review Team

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Acknowledgements

The Mid Term Review team would like to thank all those who gave their unstinting time, attention and wisdom to answer the endless questions asked by the team. Any mistakes in our reporting are the result of our misunderstanding, not of misinformation.

We would also particularly like to thank the security teams that accompanied us to the field, for their unfailing courtesy, good humour and professional conduct.

Thank you.

Acronyms

ADB	Asian Development Bank
AIDS	Acquired Immune Deficiency Syndrome
ANC	Ante-Natal Care
ART	Anti-retroviral Therapy
ARV	Anti-retroviral
AusAID	Australia Agency for International Development
BAHA	Business Coalition Against HIV and AIDS
BSS	Behavioural Surveillance Survey
BUPNG	Baptist Union of PNG
CACC	Central Agencies Coordinating Committee
CBO	Community based organisation
CCM	Country Coordinating Mechanism
CCP	Comprehensive Condom Programming
CIS	Correctional Services
CHAI	Clinton HIV and AIDS Initiative
CHASI	National Catholic Health Services - PNG
CoPC	Continuum of Prevention and Care
CPHL	Central Public Health Laboratory
CSO	Civil society organisation
DAC	District AIDS Committee
DfCD	Department for Community Development
DNPM	Department of National Planning and Monitoring
DP	Development partner e.g. AusAID
DPLGA	Department of Provincial and Local Government
DPM	Department of Personnel Management
EID	Early Infant diagnosis
FBO	Faith based organisation
FHI-360	Family Health International
FP	Family Planning
FSVAC	Family and Sexual Violence Action Committee
GFATM	Global Fund to fight AIDS, TB and Malaria
GIPA	Greater Involvement of People Living with AIDS
GoPNG	Government of PNG
HAMP Act	HIV and AIDS Management and Prevention Act 2003
HCT	HIV counselling and testing
HIV	Human Immuno-deficiency Virus

HLM	High Level Meeting
HRC	HIV Coordinator
HHISP	Health and HIV International Service Provider
HTO	HIV Technical Officer
IBBS	Integrated Biological and Behavioural Survey
IRG	Independent Review Group
IRT	Independent Review Team
JDP&BPC	Joint District Planning & Budget Priority Committee
KAP	Key affected population
LLG	Local level government
LLGSIP	Local Level Government Services Improvement Program
LJS	Law and Justice Sector
LTFU	Lost to follow up
MARP	More at risk population
MCH	Maternal and Child Care
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MO	Medical Officer
MSM	Men who have sex with men
MTR	Mid Term Review
NAC	National AIDS Council
NACS	National AIDS Council Secretariat
NASA	National AIDS Spending Assessment
NCD	National Composite Policy Index
NCW	National Council of Women
NDoE	National Department of Education
NDoH	National Department of Health
NEC	National Executive Council
NEFC	National Economic and Fiscal Commission
NGO	Non-governmental organisation
NHATU	National HIV and AIDS Training Unit
NHIS	National Health information System
NHS	National HIV and AIDS Strategy 2011-2015
NJCC	National Joint Coordination Committee
NRI	National Research Institute
NSP	National Strategic Plan
OI	Opportunistic Infection

OIC	Officer in Charge
OSL	Oil Search limited
PAC	Provincial AIDS Committee
PACS	Provincial AIDS Committee Secretariat
PACSO	PNG Alliance of Civil Society Organisations
PCMC	Provincial Coordinating and Monitoring Committee
PEP	Post Exposure Prophylaxis
PHA	Provincial Health Authority
PICT	Provider Initiated Counselling and Testing
PLHIV	Person Living with HIV
PNG	Papua New Guinea
PNGIMR	PNG Institute of Medical Research
PNGSF	PNG Sports Federation
POC	Point of Care
PPP	Public Private Partnership
PPTCT	Preventing parent to child transmission
PROMEST	Provincial Monitoring, Evaluation and Surveillance Team
PSI	Population Services International
PSIP	Provincial Services Improvement Program
SC	Steering Committee
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infection
TB	Tuberculosis
TWG	Technical Working Group
UA	Universal Access
UN	United Nations
UNAIDS	Joint United Nations Program on AIDS
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
UNWomen	United Nations Women's Program
USAID	United States Agency for International Development
VCT	Voluntary Counselling and Testing
VSO	Voluntary Service Overseas
WHO	World Health Organisation
WB	World Bank

Executive Summary

The Mid Term Review of the National HIV and AIDS Strategy 2011-15

Papua New Guinea's current response to HIV is guided by the National HIV Strategy (NHS) 2011-2015. The NHS replaced the National Strategic Plan (NSP) for HIV and AIDS, which expired at the end of 2010. The NHS is organized around three core areas of prevention; treatment, care and support; and systems strengthening. It has identified 10 top interventions whose implementation is considered essential in achieving the goals and targets of the national response by 2015. In addition to outlining broad strategies, the NHS contains an implementation framework with a range of activities to guide implementing organizations in developing annual activity plans and budgets. It also contains a Monitoring and Evaluation (M&E) framework with targets and indicators for measuring progress and impact.

The midpoint of the NHS is 2013 and to that end, a midterm review was conducted. The mid-term review was required to assess the achievement of key NHS objectives along with respective indicators set for this period. The MTR was designed specifically to take stock of higher-level achievements against the NHS goals and targets and recommend ways to maximize prevention and treatment results over the remaining period of the strategy.

The MTR used the NHS Implementation Framework as the fundamental framework for the assessment of progress, using the Top Ten Interventions identified in the Framework. For each of these, the corresponding Strategic Objectives of the NHS were reviewed in terms of:

- Indicators: baselines, targets and progress
- Planned activities: progress, relevance, effectiveness and efficiency
- Issues and opportunities.

This detailed assessment was then used to inform an overall assessment of progress, whether the achievement is on track and whether set targets are achievable within the NHS period. It was also used to assess the coverage and quality of prevention and treatment services and their use by most at risk populations (MARPS) noting specific areas requiring improvements and prioritising those most likely to deliver results. Finally it informed the assessment of the continued relevance of key results areas and approaches of the NHS. The assessment included was underpinned by an up-dated epidemiological assessment of the HIV epidemic in PNG, an understanding of the local context and history from the national team members, and an understanding of global and regional developments in the response to HIV.

The review was conducted over a period of five and a half weeks including an in-country program from 22 April to 10 May. The review team comprised seven members, four international and three national. Both in Port Moresby and in the provinces the team interacted with various sectors of the Government of PNG – primarily NACS and NDoH; development partners; civil society partners, implementers and stakeholders; service delivery staff in government as well as NGO and FBO facilities; community groups; the NHS Steering Committee. The IRT members were funded from various sources (AusAID, UNAIDS, WHO).

Findings

Epidemiology

Papua New Guinea is by far the largest among the 22 Pacific Island states and territories, in regard to both size and population, and also has a disproportionately large share of the reported HIV diagnoses. With some 70% of the region's population, it has seen the diagnosis of over 95% of the HIV cases. Nevertheless, Papua New Guinea's HIV epidemic in 2013 is of a magnitude that is considerably smaller than the epidemic of "African" proportions that many had predicted over the quarter century since the first cases appeared in 1987. The overall picture that we have of the HIV epidemic in Papua New Guinea, based on case reporting, antenatal testing and some limited behavioural and prevalence surveys has expanded vastly over the past decade. Although it remains far from complete, it allows us to draw much firmer conclusions compared to where we were a decade ago. If the epidemic is proving to be less extensive and less explosive than the predictions, it may well be that factors such as geographic and transport barriers and the predominantly rural settings have constrained contacts that might otherwise have generated higher levels of transmission. It is also possible that the prevention, treatment and other policies enacted over the past decade or more have had an impact, although there is no direct evidence for this to be the case. In either case, it is unlikely that Papua New Guinea will see a radical change in the patterns of its HIV epidemic in the immediate future, but it appears that the same warning signs that prompted concern in the past, including high levels of other sexually transmitted infection, and high levels of sexual risk behaviour remain present. An added factor of more recent years is the resources boom that is bringing money and mobility to many people, particularly in remote areas of the Highlands, who were previously not exposed to these factors, which are noted generators of HIV risk.

Overall

The Mid Term review had seven overall findings.

- Lack of evidence and reporting hampers robust assessment of progress and corresponding program adjustment
- The overall prioritisation of the NHS remains appropriate, but some re-prioritisation is needed in specific areas including making services more focussed and accessible to KAP/MARPs
- Some progress has been made in explicitly addressing gender based violence within HIV programming
- Clinical services including PPTCT, counselling and testing and care and treatment have expanded significantly, but linkage with prevention services provided in the community is weak and loss to follow up is a major issue
- STI management needs to be significantly strengthened and reconfigured to have a greater focus on detection and treatment of asymptomatic infection
- Decentralisation is the reality to which implementation of the NHS must adjust
- The duality of architecture (NACS and NDoH) is constraining full and effective implementation of the NHS.

Strategic Objectives of the Top Ten Interventions

The 33 strategic objectives covered by the Top Ten priority interventions were reviewed in detail, based upon the major activity areas identified. Most were found to be highly relevant; though the effectiveness and efficiency of their implementation were

in many cases challenged. These challenges, and ways to deal with them, are contained in the recommendations.

Recommendations

The MTR makes recommendations in five main areas:

- **Re-thinking Prevention:** The MTR considers that NACS and the NDoH should re-think 'prevention', and recognise that prevention and service delivery, whether of counselling and testing, PPTCT, STI services with condom promotion, or ART, are part of a continuum that requires all parts to be closely coordinated, linked and reinforcing. Similarly condom promotion, distribution and use, particularly for MARPs, needs to be linked closely to other services – STI management, counselling and testing, treatment and care.
- **Giving gender proper attention:** At the macro level gender-based violence needs to be tackled beyond HIV&AIDS and public health frameworks. The participation of all the partners including those outside the NDoH and NACS Health could efficiently use appropriate resources to address GBV. A National Framework is needed to guide efficient interventions of GBV.
- **The Continuum of Prevention and Care (CoPC):** The need to improve retention in care and facilitate MARP access and retention in clinical prevention and care/treatment services were two major themes identified by the MTR. Around the world, the conceptualization of service delivery across the CoPC has assisted health managers and service providers to plan accessible, client centred HIV services that meet the needs of MARPs and PLHIV across their lifetime.
- **Monitoring and Reporting on the NHS:** In light of resource and capacity constraints, NACs and NDoH need to prioritise those activities that are most essential but also feasible, and to revise targets accordingly.
- **The Architecture:** It is critical that NACS should work closely with NDoH to strengthen and support the health sector's integrated response; and to adapt to working effectively within the decentralized processes introduced by GoPNG. Immediate identification and strengthening of specific NACS functions that support this should be undertaken and a road map developed to cover M&E, focus on MARPS, developing integrated models, how to extend CoPC beyond health service delivery, and decentralization.

The MTR makes **28 specific recommendations** in these five areas:

1. Institutionalize and roll out the National Strategy for Comprehensive Condom Programming (CCP).
2. Ensure that comprehensive, targeted interventions for high-risk situations and populations are the priority focus within CCP.
3. Ensure that the prevention is adequately incorporated into the continuum of prevention and care (CoPC).
4. Reduce the priority status of SO 1.1.4, combine SO 1.1.6 and 1.1.7, and drop SO 1.1.9. SO 1.1.4 concerns partner reduction.
5. Male circumcision should remain within the potential scope of prevention programming in PNG; but not among the top ten priority interventions until better data are established from the surveillance system, and the cost-effectiveness of the intervention effectively modelled.

6. NACS & NDOH should use their experience and current base to facilitate a Government dialogue and endorse a National Strategic Framework to address Family and Sexual Violence.
7. NDoH should work with AusAID, UNAIDS, USAID and other development partners to map and review existing sexual violence services and strengthen the linkages between medical care and treatment, counselling and support and law and justice.
8. NACS and NDoH should work with FSVAC to establish five more family support centres in high and medium prevalence areas.
9. The CoPC model of service delivery should be institutionalized in PNG to strengthen links between PLHIV and KAP/MARPs in the community and clinical services.
10. The scale up of PPTCT in PNG needs to be carefully planned.
11. Mechanisms to reduce LTFU should be examined across all programs providing ART including PPTCT services.
12. Integration of family planning services into the HIV and PPTCT program in ANC clinics is urgent, as this is an essential part of HIV prevention.
13. Over the remaining two years of this NHS, a focus on targeting the provision of counselling and testing to those most likely to have HIV infection should be prioritised.
14. The extent of lost to follow up (LTFU) in the HIV care and treatment program needs to be urgently ascertained as it has serious implications for the durability and success of PNG's first line ART regimes.
15. Data management issues need to be urgently addressed as they have widespread implications (forecasting, budgeting, assessing coverage and need for scale up, monitoring LTFU etc.).
16. The management of STIs should be considered a priority activity over the remaining years of the current NHS and included in the Top Ten Interventions.
17. GoPNG/NDoH should urgently consider implementation of the recommendations from the recent PASHIP evaluation.
18. The national SITWG should take an active role in ensuring that progress continues to be made in strengthening the strategic information system.
19. NDoH must renew efforts to rebuild capacity, to allow it to perform its key surveillance role, to effectively coordinate the HIV surveillance system and better analyse and interpret surveillance data.
20. For the next two years NDoH should focus on three priorities. Work on data collection forms should continue.
21. Database security must also be addressed.
22. Strengthening ProMESTs should be a priority, as it has the potential to yield substantial benefits for the entire surveillance system.
23. A feasible set of behavioural and bio-behavioural surveillance activities need to be programmed, with priority being given to identifying sentinel surveillance through ongoing, repeatable BSS in high prevalence settings and with key populations exposed to high levels of risk; where appropriate results from existing BSS should be used as baseline data.

24. NACS should engage its Council in a dialogue to interrogate the findings of this MTR, to identify the required new roles and responsibilities for NACS, and to determine a road map and accountability framework for NACS to implement the road over the coming two years.
25. To better inform this dialogue, NACS should engage NDoH and other service delivery partners in immediate and urgent discussion about how best to move the health sector towards this new model.
26. Internally, the NHS planning process at the national level will now be irrelevant for the NGOs and should focus on strengthening the PACS to support the stakeholders at the sub-national level.
27. NACS should re-assess and re-design how it coordinates at sub-national level.
28. NACS should facilitate strong NGO & Government (NDoH, NACS, PACS, PG) collaboration to encourage better and targeted use of TA, training and other resources to build capacity for NACS, PACS, PG and the NGO partners.

1. INTRODUCTION, METHODOLOGY AND PROGRAM/PROCESS

Papua New Guinea's current response to HIV is guided by the National HIV Strategy (NHS) 2011-2015. The NHS replaced the National Strategic Plan (NSP) for HIV and AIDS which expired at the end of 2010. The NHS is organized around three core areas of i) prevention; ii) treatment, care and support; and iii) systems strengthening. It has identified Top Ten interventions whose implementation is considered essential in achieving the goals and targets of the national response by 2015. In addition to outlining broad strategies, the NHS contains an implementation framework with a range of activities to guide implementing organizations in developing annual activity plans and budgets. It also contains a Monitoring and Evaluation (M&E) framework with targets and indicators for measuring progress and impact. The NHS is PNG's overarching national framework for responding to HIV to which all stakeholder activities must be aligned.

The mid-term review (MTR) reported here was commissioned by the National AIDS Council (NAC) and Development Partners in order to assess the achievement of key NHS objectives along with respective indicators set for this period.

1.1. Objectives and Scope of the Mid Term Review

The MTR was conducted to take stock of higher level achievements against the NHS goals and targets and recommend ways to maximize prevention and treatment results over the remaining period of the strategy. The specific objectives were to:

- Assess and document progress made towards achieving the prevention, treatment, care and support, and systems strengthening objectives and targets set out in the NHS. It was to evaluate whether the achievement is on track and whether set targets are achievable within the NHS period, providing evidence underpinning its conclusions and judgments. It was also to document any challenges and lessons to inform future planning and implementation.
- Assess the coverage and quality of prevention and treatment services and their use by more at risk populations (MARPS) noting specific areas requiring improvements and prioritising those most likely to deliver results;
- Assess the continued relevance of key results areas and approaches of the NHS in light of any changes in the global and national HIV response context;
- Develop a short list of recommended focus areas with a limited number of high impact activities and targets achievable within existing resources and available capacity of GoPNG and NGO partners to help PNG achieve MDG related to HIV by 2015.

Cross-cutting themes such as gender integration, greater involvement of people living with HIV and issues of rights were to be addressed through their inclusion in each of the above fields.

The team conducting the review ("the independent review team" or IRT) was asked to contribute to planning for a focused impact study of the national HIV response by identifying the sort of impacts they considered the current response is producing, and suggesting possible sites for a comparative study and identifying appropriate quantitative data on the area of impact.

1.2. Overall MTR Methodology

The IRT adopted the following methodology for the MTR:

- Review documents (published and unpublished) as appropriate;
- Consultations with key stakeholders at national, provincial, district and facilities levels;
- In-depth discussion with key informants;
- Collation, analysis, triangulation and interpretation of data;
- A presentation of preliminary findings in a two-day validation workshop

The IRT used the NHS Implementation Framework as the fundamental framework for the assessment of progress, using the Top Ten Interventions identified in the Framework. For each of these, the corresponding Strategic Objectives of the NHS were reviewed in terms of:

- Indicators: baselines, targets and progress
- Planned activities: progress, relevance, effectiveness and efficiency
- Issues and opportunities.

This detailed assessment was then used to inform an overall assessment of progress, including whether the achievement is on track and whether set targets are achievable within the NHS period. It was also used to assess the coverage and quality of prevention and treatment services and their use by more at risk populations (MARPS) noting specific areas requiring improvements and prioritising those most likely to deliver results. Finally it informed the assessment of the continued relevance of key results areas and approaches of the NHS.

The assessment was underpinned by an updated epidemiological assessment of the HIV epidemic in PNG, and by team members understanding of local context and history, and of global and regional developments HIV responses.

1.3. Program/Process

The review was conducted over a period of five and a half weeks from 15 April to 22 May 2013, of which 22 April to 10 May was in-country:

April 15 – 21	Documentation review
April 22	Initial briefing by NHS Steering Committee
April 22 – 28	Port Moresby
April 29 – May 3	Field visit to Western Highlands, Enga, East New Britain, Bougainville (two teams)
May 4 – 7	Port Moresby
May 8 – 9	Validation Workshop
May 10	De-brief with Steering Committee
May 11 – 27	Report writing

The team comprised seven members:

- Peter Godwin – team leader
- Dr Ninkama Moiya – policy, planning, prevention
- Dr Rachel Burdon – clinical specialist
- Dr John Millan – clinical specialist
- Angela Mandie-Filer – Institutional strengthening, capacity building, gender
- Bradley Mathers – epidemiologist
- Prof. John Kaldor - epidemiologist

Both in Port Moresby and in the provinces, the team interacted with staff from various sectors of the Government of PNG – primarily NACS and the National Department of Health (NDoH); development partners; civil society partners, implementers and stakeholders; service delivery staff in government and non-governmental organisations (NGO) and faith based organisations (FBOs); community groups and the NHS Steering Committee (see Annex 3 for a full list of people interviewed).

The IRT members were funded from various sources including AusAID, UNAIDS and the World Health Organisation (WHO).

2. CONTEXT AND EPIDEMIOLOGICAL OVERVIEW

2.1. Changing contexts – internal and external

The National HIV and AIDS Strategy (NHS), 2011-2015 was launched on World AIDS Day in December 2010 and implemented from 2011. At that time many partners were still implementing the activities commenced under the earlier NSP (2006-2010), so 2011 was really the year of transition from NSP to NHS. Many activities under NSP's seven focus areas were still relevant and informed the development of the NHS. In the two years since, however, formal implementation of the NHS has been established.

During this time the country has continued to experience major socio-economic development, largely related to resource extraction industries. These have generated demands for labour, both long-term and short-term, resulting in considerable migration of people, particularly from the densely populated Highlands. In addition, the 2012 election was associated with considerable social turmoil. The new government has committed to a range of socio-economic development programs, including in the health and education sector. This includes a whole-of-government decentralisation program. There are significant implications for the design, funding and implementation of social development programs, including those in health. The PNG health sector is adapting to major changes, aimed at higher efficiency gains for comprehensive and equitable public health care.

During this period, NACS has also experienced some instability. For the last year it has had no formally appointed Director and the Council has had no Chair. During the period of the MTR the new Director, Chair and Council were formally sworn in. The organisation has been downsized and re-structured, from 140 people to 100, with 40 people based in Port Moresby, and 60 people based in the provinces. Further, the NACS budget has decreased from $20 million in 2011, to $8 million in 2012, and $3 million in 2013.

Externally, with regard to HIV and AIDS, there have been significant changes in global and regional thinking. Improved measurement and understanding of the dynamics of HIV epidemics around the world, significant technological advances, the massive roll out of successful treatment and care, plus a significant re-alignment of disease and health financing globally, has led to a major re-thinking of how best to respond to the HIV epidemic.

At the same time, wide-spread recognition that the HIV epidemics in Asia and the Pacific (and in other parts of the world) were significantly different to those in Sub-Saharan Africa, has led to recognition that such 'concentrated' epidemics can best be managed with targeted public health approaches, where multi-sectoral responses are managed by and within the health sector[1],[2]. This is linked to a growing recognition that responses are most likely to be cost-effective and sustainable with greater integration into existing health programming for example, with Prevention of Parent to Child Transmission (PPTCT) integrated into Maternal and Child Health (MCH) services, and HIV and AIDS treatment and care integrated into chronic care delivery systems, such

[1] Much of this recognition results from the work of the WHO Commission, and 2011 World Conference, on Social Determinants of Health, as well as the recognition of the growing challenge of Non Communicable Diseases (NCD) globally.

[2] See also, very recently: *Redefining global health-care delivery*, Jim Yong Kim, Paul Farmer, Michael E Porter, The Lancet, published online May 20, 2013 http://dx.doi.org/10.1016/S0140-6736(13)61047-8

as those being developed for chronic care for people with non-communicable diseases (NCD).

These internal and external contextual changes are highly significant for the PNG NHS. As the epidemiological section below shows, PNG has a concentrated epidemic. The rapidly changing socio-economic situation in PNG provides an opportunity to effectively target high quality HIV programming where it is likely to be most needed, and have the biggest impact – for example, where rapidly expanding urban and peri-urban workforces create the conditions where 'transactional sex' (the exchange of sex for money, goods or services) will flourish. It also presents significant challenges to ensure that resources are efficiently allocated specifically to targeted programming.

2.2. Epidemiological overview

Papua New Guinea (PNG) is by far the largest among the 22 Pacific Island states and territories, in regard to both size and population, and also has a disproportionately large share of the reported HIV diagnoses. With some 70% of the region's population, it has seen the diagnosis of over 95% of the HIV cases. Nevertheless, PNG's HIV epidemic in 2013 is of a magnitude that is considerably smaller than the epidemic of "African" proportions that many had predicted over the quarter century since the first cases appeared in 1987. These predictions had been based on the limited information available showing that other sexually transmitted infections occurred at high levels in PNG (Vallely et al, 2010), and an understanding that patterns of sexual practice and the broader socio-behavioural context predisposed the society to HIV transmission.

Surveillance of HIV in PNG in the first two decades relied largely on case reporting of diagnoses of HIV infection and AIDS, and was subject to the valid critique that testing coverage was low and limited to major population centres; probably over-represented symptomatic cases presenting for care (and did not therefore capture more recent transmissions so well) and did not provide any information on the prevalence of infection in those who may be at higher risk. Nevertheless, the series of case reports provided a clear impression, based on the roughly equal count of male and female diagnoses, of an epidemic that was primarily heterosexual, with the age of diagnosis at least half a decade younger in women, reflecting the type of sexual partnerships that represented risk.

The reporting also pinpointed the Highlands Region as the major focus of HIV diagnoses, in regard to both the place of testing and the province of origin of those diagnosed elsewhere, particularly in Port Moresby. A survey in women who were described as sex workers found a substantial prevalence of infection (around 17%), but was never repeated in the same way, and was conducted in a large urban centre (Port Moresby) only (Kelly 2011). Among women attending Port Moresby General Hospital for antenatal care, who have been offered HIV testing routinely since the early 1990s, the prevalence has crept up slowly over time but is still well below 2%. A few other antenatal clinics were included in surveillance rounds during the early to mid-2000s, and confirmed that prevalence was elevated in the Highlands and Port Moresby compared to other parts of the country. An intriguing feature of the HIV epidemic was the discovery that the predominant subtypes of the virus were those more commonly found in African countries, rather than the types that were most prevalent in the Asia-Pacific Region. This observation was probably the only feature of Papua New Guinea's epidemic that had an African dimension, apart from the sex ratio.

The quality and coverage of the surveillance system changed dramatically from about 2008, when there was a massive expansion of HIV testing sites around the country, both through antenatal clinics and more generally primary care services. This expansion coincided with the growing availability of treatment with effective antiretroviral therapy (ART). The number of antenatal services that offer routine testing

is now nearly 300, having increased more than five-fold from 2007 to 2011, and the number of other sites and the number of tests actually administered are expanding at a similar rate. As the number of tests increased, the picture of the Papua New Guinea epidemic became much clearer, and generally confirmed the findings of the more limited surveillance systems that had been previously available. At around 0.8%, HIV prevalence among pregnant women in Papua New Guinea was higher than in many other countries of the Asia-Pacific region but 10-20 times lower than in the "high prevalence" countries of southern Africa. On the basis of the available antenatal prevalence data, there is in fact a downward trend in HIV prevalence in recent years. This is almost certainly due to the inclusion of new sites in areas of lower prevalence, rather than an actual reduction, given that the periods of sharpest decline coincide with the periods of most rapid increase in testing (see Figures 1 and 2). There is certainly no evidence of a "hidden" epidemic in rural areas or in regions currently considered to have lower prevalence (see Figures 3-4), and the Highlands and Port Moresby remain the locations where infection is more common.

There have been some behavioural surveys in various populations considered to be at higher risk in Papua New Guinea, but they have not been conducted on a repeat basis or over a broad enough geographic area to provide a basis for drawing any conclusions about recent trends in HIV risk behaviour or the impact of intervention programs. One particular challenge with behavioural surveys has been the means by which people at higher risk may be both defined, and repeatedly surveyed. Women who engage in sex work or related activities such as "transactional sex" generally do so outside contexts such as brothels or designated bar areas that are used for survey recruitment in other countries, and male client groups are similarly hard to identify as distinct entities. A closer engagement between surveillance and prevention activities would be one way to address this issue, for example by incorporating a surveillance question into outreach activities for limited, regular repeated time periods. Also, clinical services that have been established to provide testing and treatment for particular populations are potential providers of routine data on HIV prevalence and risk behaviours for these population groups.

The overall picture that we have of the HIV epidemic in PNG, based on case reporting, antenatal testing and some limited behavioural and prevalence surveys has thus expanded significantly over the past decade. Although it remains far from complete, it allows us to draw much firmer conclusions compared to where we were a decade ago. If the epidemic is proving to be less extensive than the earlier predictions, it may well be that factors such as geographic and transport barriers and predominantly rural settings have constrained contacts that might otherwise have generated higher levels of transmission. It is also possible that the prevention, treatment and other policies enacted over the past decade or more have had an impact, although there is no direct evidence of this. There is also no evidence that HIV programming that has been implemented is of adequate scale, focus and intensity to have achieved significant national population level impact. Whilst it appears unlikely that there will be a radical change in the PNG HIV epidemic in the immediate future, the same warning signs that prompted concern in the past, including high levels of other sexually transmitted infections (STIs), and high levels of sexual risk behaviour remain present. In addition, the recent resources boom that is bringing money and increased mobility to many people, particularly in remote areas of the Highlands may increase risk of transmission of HIV. Increasing resources and mobility are associated with increased HIV prevalence in contexts such as Cambodia and southern Africa which, despite differing substantially from PNG, serve as a warning about the potential role of these types of socio-economic shifts in the development of a country's HIV epidemic.

Figure 1: Number of HIV tests performed at antenatal clinics by region

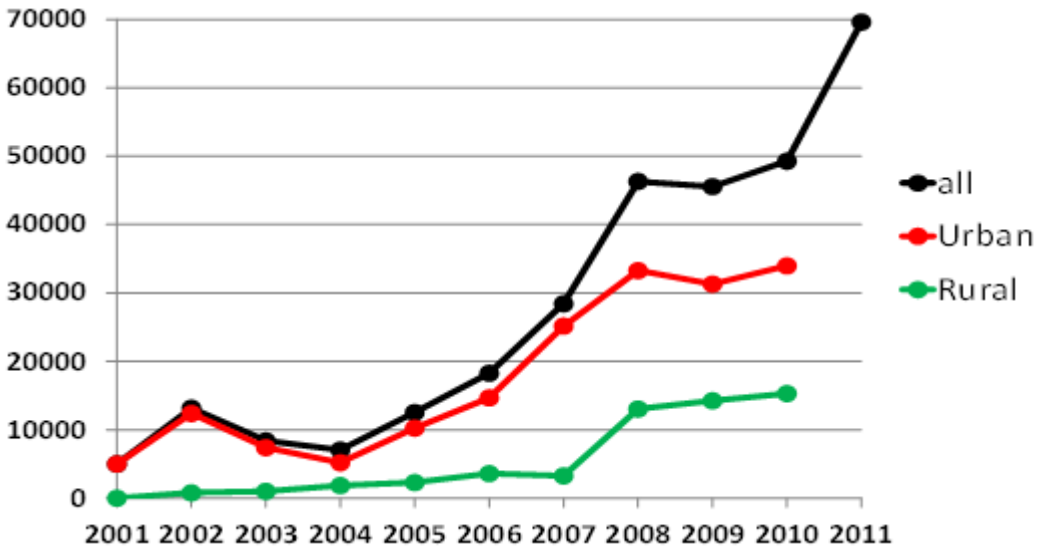


Figure 2: HIV prevalence among pregnant women urban vs rural

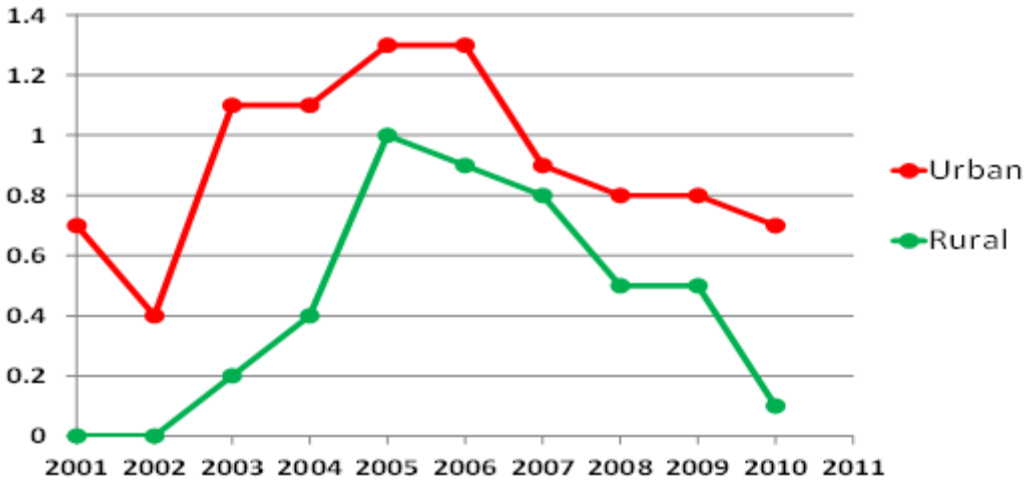


Figure 3: HIV prevalence among pregnant women by urban versus rural

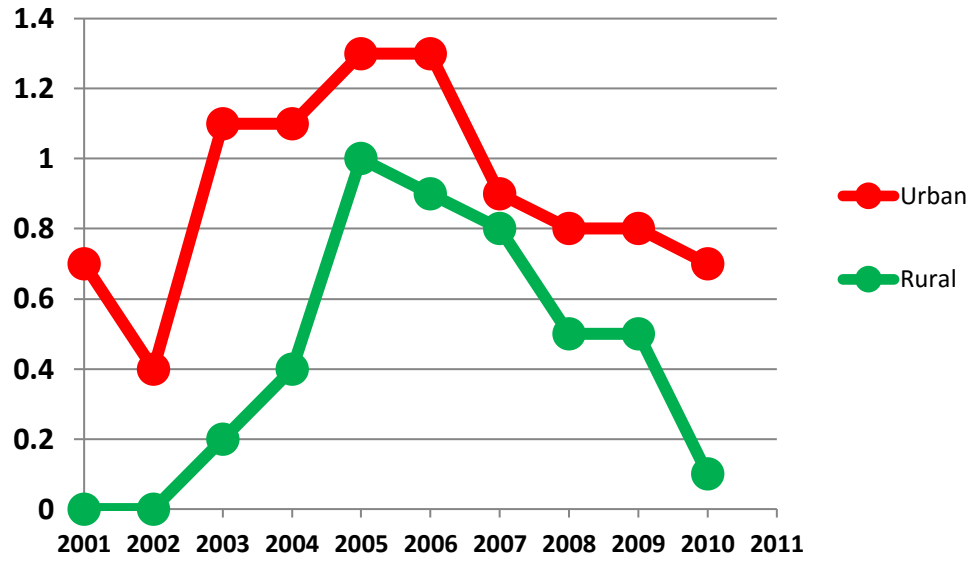
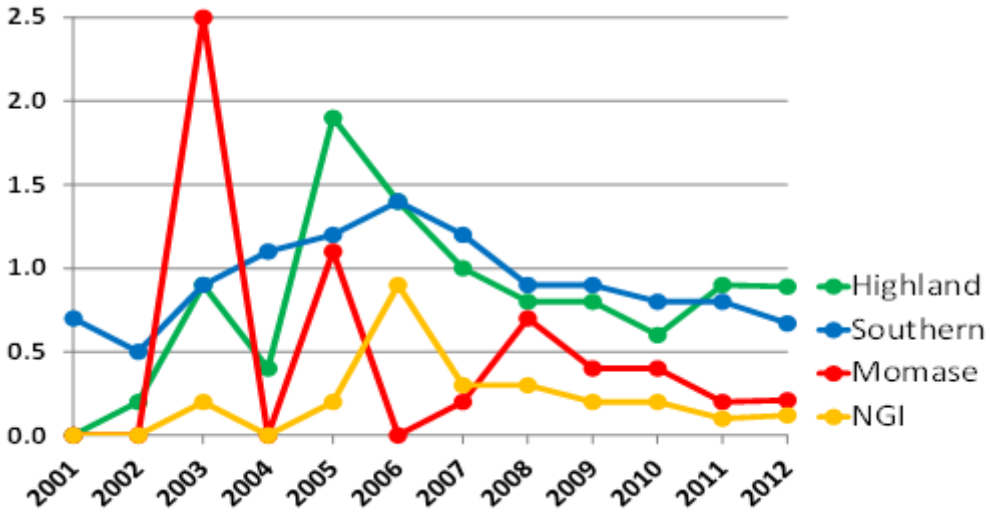


Figure 4: HIV prevalence among pregnant women by region



2.3. Prioritising HIV

Papua New Guinea faces many competing social and health priorities, so it may be reasonable to ask whether HIV should continue to rank so highly in the funding hierarchy. This decision will need to be made in the context of broader health policy making. However, there is no doubt that HIV prevention should remain on the PNG strategic agenda, to ensure that the biological, behavioural and structural risk factors for transmission receive attention, and that those with infection are able to know their status and access treatment, to benefit their own health as well as reducing the risk of onward transmission.

Overall, the IRT found significant gaps in data about HIV and risk behaviour. The information made available for the MTR was not timely, in the sense that there was little or no data from 2012, and the 2011 data had not been finalised at the time of the review. Monitoring of risk behaviours, and of HIV prevalence in populations considered most at risk appeared to be sporadic, with no agency appearing to be responsible and accountable for taking the lead in this area. It is also essential that effective

epidemiological monitoring systems are developed and sustained, to make sure that resources required for HIV prevention and care are identified accurately, and that the size, scope and location of activities can be modified according to need.

3. REVIEW FINDINGS

3.1. Overview

The Mid Term Review had seven overall findings:

- Lack of evidence and reporting hampers robust assessment of progress and corresponding program adjustment
- The overall prioritisation of the NHS remains appropriate, but some re-prioritisation is needed in specific areas including making services more focussed and accessible to more at risk populations (MARPs)
- Some progress has been made in addressing gender based violence within HIV programming
- Clinical services including PPTCT, counselling and testing and care and treatment have expanded significantly, but linkage with prevention services provided in the community is weak and loss to follow up may be a major issue
- Management of STIs (sexually transmitted infections) needs to be significantly strengthened and reconfigured to include greater focus on detection and treatment of asymptomatic infection
- Decentralisation is the reality to which implementation of the NHS must adjust
- The duality of architecture (NACS and NDoH) is constraining full and effective implementation of the NHS.

3.1.1. Reporting, evidence, progress and program adjustment

While there is a considerable amount of data being collected in PNG, NACS, as the 'owner' of the NHS, is currently unable to report against the NHS. The NHS has a comprehensive monitoring and evaluation framework (MEF) framework, and has identified 32 National Indicators, with 23 that correspond to the Top Ten Interventions. Unfortunately, implementing agencies do not report in ways that allow assessment against the objectives and targets of the NHS. Considerable effort goes into collecting surveillance data but as shown below in the 'surveillance' section, a number of difficulties are experienced in collecting and analysing these data. Donor-funded projects report regularly and in detail to their donors and compile external reports, primarily for the United Nations (for example, the Global AIDS Response Report). Reporting of what and how resources are spent is weak: a NASA (National AIDS Spending Assessment) was conducted for 2009-10, prior to the NHS, but is only to be repeated later this year. This sporadic and uneven reporting means that it is difficult for the NACS to form ongoing assessments of whether or not the NHS is progressing in accordance with set priorities. It also means that it is difficult for the program to be adjusted based on evidence, and for resources to be allocated appropriately.

3.1.2. Prioritisation of the Strategy

The prioritisation of the NHS through the Top Ten Interventions appears to be appropriate and relevant, and largely on track. Although the data to form an assessment are limited, it appears that significant progress is being made in most areas. Our analysis suggested that some re-prioritisation, particularly in Priority Area 1 (Prevention) and Priority Area 3 (Systems strengthening) may be needed. This recommendation in relation to Priority Area 1 is based on a lack of progress in focusing prevention more closely on high-risk situations and increasing effectiveness and efficiency of targeted prevention. In Priority Area 3, our recommendation in relation to

re-prioritisation is in order to: respond more effectively to the demands and opportunities of the whole-of-government decentralisation; strengthen the surveillance system; and review the architecture of the national response in the light of changing economic and systems imperatives.

3.1.3. Some progress has been made in explicitly addressing gender based violence within HIV programming; the issue is so important it needs to be addressed on a wider scale

Gender inequality and gender-based violence (GBV) is a serious social and development concern in PNG. All HIV and AIDS interventions carried out against a background of high levels of family and sexual violence and GBV will undermine the goal of the NHS to provide equal opportunity for men and women to participate equally in the response. Yet little progress has been made in addressing GBV in HIV and AIDS interventions. There was little evidence identified that interventions are, for example, addressing issues of violence as a result of partner HIV testing or diagnosis; preventing HIV infection as a result of sexual assault; and providing sexual assault services (including post-exposure prophylaxis) for female sex workers who have a higher rate of sexual assault than women generally.

Overall, it appeared that partners in PNG considered that the problem of GBV is so large that it needs to be tackled beyond HIV and AIDS and public health frameworks.

3.1.4. Expansion of PPTCT, counselling, testing, care and treatment services

Counselling, testing, treatment and care services have expanded dramatically and appear to be located in areas of need. Decentralisation of services to the district level has occurred and capacity building efforts appear to have improved the consistency of HIV services across provincial and district sites. Much of the scale up of counselling and testing has occurred in the antenatal care (ANC) and PPTCT setting. Most recently available data indicated that 44% of ANC sites in PNG were providing HIV counselling and testing. These coverage rates of PPCT need to be interpreted in the light of the relatively low rate of use of ANC services by pregnant women in PNG, with around 20% of women not attending ANC even once during pregnancy.

The yield of HIV positive women from testing in ANC is low (~0.5%) which is what one would expect, but this suggests that testing through ANC services (which represents around a half of HIV testing done in PNG) is not effectively reaching the higher risk population.

HIV testing in STI and tuberculosis (TB) services, which yield much higher rates of HIV positivity, remains low with 13% of STI clients and 25% of TB clients having a record of one or more HIV counselling/testing episodes. This represents a massive missed opportunity for care and support of those infected, and for secondary prevention.

There is also evidence suggesting that a significant proportion of those at risk of HIV either don't understand the need for testing or face barriers accessing HIV testing. In 2011, 36% of new HIV infections were identified in inpatient facilities - a possible indication of people presenting unwell and immune-suppressed with advanced HIV.

The scale up of ART has been impressive in PNG with a total of 11,764 people living with HIV initiated on ART in PNG out of an estimated 16,552 needing treatment. This indicates ART coverage rates of 71%. The Government of PNG has demonstrated major commitment to PNG's HIV care and treatment program and has covered the costs of ARV drug procurement since 2010. Of concern however are very high rates of lost to follow up which were reported across many sites – the scale of this issue is hard to determine due to problems with monitoring ART cohorts and needs urgent

attention. Further, across all the clinical services, linkage with HIV prevention services is weak. This means that there are many missed opportunities for MARPs to access HIV prevention and care.

3.1.5. STI management needs to be significantly strengthened

Currently the management of STIs is not covered under the NHS Top Ten Interventions. Given the high burden of STIs in PNG and the increased risk of HIV transmission related to untreated STIs, the management of STIs both amongst people living with HIV and in MARPs is an important HIV prevention intervention in PNG. The MTR strongly recommends that the management of STIs be considered a priority activity over the remaining years of the current NHS. Furthermore it is recommended that PNG complements its current focus on STI clinical management using the syndromic management approach with a more public health approach focused on detection and management of asymptomatic STIs among particular population groups and in particular geographic locations.

3.1.6. Decentralisation is the reality

PNG is engaged in a major whole of government decentralisation process. This is particularly relevant for the NHS in terms of the re-structuring of the health sector with the introduction of Provincial Health Authorities (PHA), and the changes in the flow of funding - directly to provinces, district and local level governments and far less through central, national channels. Implementation of the NHS, primarily through the health sector, but also more and more through provincial governance structures, has been hampered by inadequate capacity to address these changes; though positive responses are emerging. The NACS has been slow to accept and adapt to the fundamentally changed funding flow patterns emerging with decentralisation, which implies a changed role - that it will no longer be a major source of funding for implementation, but rather must concentrate on technical support to provincial structures. There will also be a greater need to strengthen the capacity of provincial health services to provide a full, public-health driven, continuum of prevention and care.

The HIV response needs to be better institutionalised into provincial and district level service delivery. The needs of the different provinces and districts will vary - whilst HIV remains a priority for high prevalence provinces (such as the Highlands), a much more limited package of services is required for low prevalence provinces. Provincial AIDS Councils (PACs) must strengthen their links and partnerships with Provincial and Districts Administrations (PDAs) and participate in annual planning processes to ensure appropriate resources are allocated for HIV. A role for NACS may be to create closer partnership with the National Council of Women (NCW) and assist PACs to work with NCW's extensive district and local networks.

3.1.7. Duality of architecture

The duality of architecture, with NACS coordinating a multi-sectoral response, but NDoH being responsible for the majority of 'services' provided, is becoming increasingly recognised as obsolete, globally and regionally, with respect to concentrated epidemics such as that in PNG. The inherent tensions of this duality are likely to have constrained the development of more public health oriented approaches to health service delivery, and the coordination of civil society and governmental sector implementation of such approaches. Without resolution, the challenges of this duality are likely to further constrain progress to NHS implementation.

In the following sections the progress outlined above, and the challenges, are described in more detail, particularly with regard to assessing the continued

relevance of key results areas and approaches of the NHS; progress towards achieving the objectives and targets set out in the NHS, including the coverage and quality of prevention and treatment services and their use by more at risk populations; whether achievement is on track and whether set targets are achievable within the NHS period.

3.2. Priority Area 1: Prevention

Of the Top Ten interventions for the NHS, five primarily address prevention and cover sixteen strategic objectives (see p.3 of the NHS Implementation Framework). These five interventions are to:

- Develop and scale up combination prevention programs for addressing multiple concurrent sexual partnerships in locations where this behaviour is common
- Develop and scale up targeted HIV and STI combination prevention interventions for MARPs
- Provide significant improvement in the availability and accessibility of male and female condoms through condom social marketing and distribution. This includes addressing stigma, myths and misinformation around condom use.
- Develop specific interventions to reduce HIV vulnerability associated with gender based violence and sexual violence against women and girls
- Ensure that all pregnant women and their partners have access to the full range of prevention of parent to child transmission (PPTCT) interventions through strengthened maternal and child health (MCH) service delivery.

A detailed review of progress against the sixteen strategic objectives is provided in Annex 1. The continued relevance, overall progress, coverage and quality, and whether achievement is on track and targets are achievable within the NHS period is highlighted here. Recommendations prioritising specific areas requiring improvements most likely to deliver results are given in the following section “Recommendations”.

3.2.1. Condom-based prevention programs: Strategic Objectives 1.1.2, 1.1.3, 1.1.4, 1.1.6, 1.1.7, 1.1.8, 1.1.9:

Relevance

Condom use with non-regular partners remains the single most important prevention measure for PNG. The country is facing rapid socio-economic and cultural change: the rapidly expanding resource extraction industries and their immediate demands for labour, are causing significant population mobility and disruption of traditional family and community sexual and gender mores. Under these circumstances the use of condoms as HIV prevention is a more useful strategy than attempts to limit non-regular sexual partners – particularly in the short term. This is widely recognised by service providers throughout the country.

Most of the strategic objectives in the Top Ten interventions rely primarily upon condom supply, distribution, accessibility, acceptance and use and thus remain highly relevant.

The MTR found that in the past year or so, many implementers and development partners have shifted their focus away from ‘general population’, towards MARPs (NHS SO 1.1.2 and 1.1.6). The re-structuring of Tingim Laip, for example, reflects this, as

does the UN support for size estimations of MARPs, AusAID's guidelines for partners[3], and recent work in NACS to identify specific communication strategies for specific MARPs. This is considered by the MTR to be highly relevant. This shift in focus towards MARPs has not been universal in PNG – it appeared that there were still some members of NACs and PACs, and their partnership base that were supportive of large-scale general population interventions, and did not bring a targeting perspective to bear on their work.

The IRT found that the strategic objective 1.1.4 (Males and females reduce the number of their concurrent sexual partners), may not be relevant in the PNG context – for reasons outlined below. As noted in Annex 1, while this message appears in much of the prevention work being done, field workers, even in FBOs, tend not to stress it, saying that having multiple sex partners has become too common a behaviour to be worth struggling against. In addition, with polygamy relatively common in PNG, this message is inconsistent or difficult to interpret for men and women in polygamous relationships.

Further, SO 1.1.9 ("Other more-at-risk populations are identified and interventions established to address specific risk behaviours") is considered to be duplicative of SOs 1.1.6-1.1.8. It is unlikely, in the PNG context, that significant other MARPs will emerge: injecting drug use is very limited; and groups such as 'mobile men with money' (MMM) are at risk because of their sexual behaviours. If the multiple partner sexual behaviour is targeted within the context of paid/transactional sex, this is likely to be sufficient.

Progress toward targets, coverage and quality

The extent to which the fundamental condom use strategy is achieving NHS objectives and goals must be questioned, on three grounds:

- The impact of the strategy can only be tracked properly by repeated surveys that measure whether condom use (and associated behaviours) is changing. While some local or special group behavioural surveys suggest varying levels of condom use (see Annex 1) with non-regular partners, there has been, to date, little comprehensive tracking. There exists no coherent picture of the development of consistent use of condoms in high-risk sex, its associated drivers and barriers, and changes over time – rather scattered snap-shots.
- The targeting of condom use to areas where it is needed most is still under-developed. To be effective, condoms need to be used where the risks of HIV are highest. HIV is not highly transmissible in general, so co-factors, such as STIs, anal sex, and high rates of partner exchange are needed for it to spread. In practice this means in areas of high prevalence, or among more-at-risk groups of people. While there is increasing focus over the last year or so to do this, interventions targeting such groups are still under-developed, limited in coverage, and tend to be uncoordinated.
- With relatively high levels of anal sex taking place in PNG[4] this high-risk activity needs greater attention. It appears to be widespread, yet little understood, and largely unaddressed in specific messaging and harm reduction promotion. The

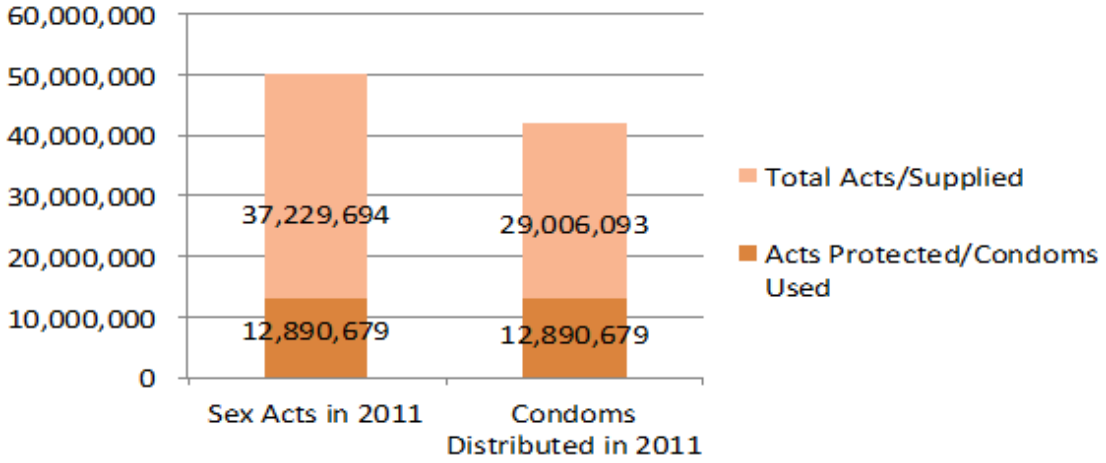
[3] Cf *AusAID Guidance on Strategic Directions for HIV NGO partners*

[4] EG: From BSS surveys: 15% of male truck drivers, 41% of women at OSL, 12% of Lae STI clients: and some 30% of the ANS survey

various surveys suggest that the specific dangers of transmission in anal sex are not recognised at all by respondents.

The coverage and quality of current condom promotion and distribution must also be questioned. The various surveys reviewed (see Annexes 1 and 4) reveal low levels of condom use in transactional sex, and limited awareness of and access to condoms, in various populations, including MARPS[5]. Considering the very large numbers of condoms distributed over the last few years (90 million between 2009 and 2012), and the very wide range of interventions in which they have been the primary focus, the low levels of use suggest that interventions have failed to have the impact required. This may be due to the general population focus of much condom promotion and distribution in recent years. The development of new approaches focusing on specific targeted populations and situations is important, and needs to be implemented thoroughly. Distribution of condoms, both male and female, and promotion efforts, covering all aspects of access, acceptability, barriers, and use, has not been coherently guided. Multiple implementation modalities, ranging from high quality social marketing, through extensive outreach and promotion, to random but widespread free distribution, have resulted in considerable lack of coherence and coordinated impact. In addition, they have resulted in huge wastage of condoms, and general dilution of condom promotion efforts.

Figure 5: Condoms – gap in usage and underused supply



Source: PSI

Figure 5 shows the estimated total sex acts in PNG in 2011 and the number of condoms distributed that year. As indicated, it was estimated that 44% of condoms distributed in PNG during 2011 were used, and that almost 25% of sex acts in 2011 were protected by condoms. These data suggest that rather than expanding condom distribution, condoms need to be distributed where a) people are engaging in high risk sex and b) there is adequate and effective behaviour change communication to support condom use for HIV and STI prevention.

There are challenges with identifying target populations and situations for condom promotion and distribution. A distinction is generally made in PNG between 'sex work' and 'transactional sex'. It was unclear to the MTR how helpful this distinction is since sex work, per se, does not necessarily create high risk of HIV transmission; but high

[5] It should be noted that there are no data tracking changes in condom use for the period of the NHS: these assessments are made on the basis of mainly earlier, one-time surveys

volume, multi-partner, unprotected sex does[6]. In PNG, numbers of clients among people engaged in both sex work and transactional sex are low: more than half (53%) of the Mt Hagen sex workers had 4 or fewer clients in a week, with only 3% having more than 1 a day; 76% of the respondents in the Askim Na Save study had 6 or fewer clients per week, with 46% having only 1 or 2, and only 17% having more than two per day; the FHI BSS female 'sex workers' had a mean of 4.5 clients in the previous month, while the MSM had a mean of only 1.5 partners in the previous month. These are not large numbers of 'clients'; and hardly present a picture of a robust, conventional 'sex industry'. It is established, however: under half (48%) of the Mt Hagen sex workers found their own clients; and 26% had been jailed at least once by the police as a result of exchanging sex. This suggests that some attempts must be made to address these 'structural aspects' of sex work – which we did not see had happened so far. Identifying risk levels among men and women who exchange sex, and targeting them appropriately, will be tricky. The picture with regard to MSM, whether 'gay-identifying' or not, is equally unclear in terms of risk levels and how to target them.

The work in NACS to define and identify MARPs more precisely, and to develop targeted communication strategies, is thus very important and needs to be urgently and vigorously continued. It needs to be included within a wider framework, however, lest it become another uncoordinated activity. In the same way, the work about to be undertaken with UN support to estimate population sizes for different MARPs needs to be coordinated within the same framework.

The National Strategy for Comprehensive Condom Programming (CCP) is being developed, and potentially provides a framework within which these challenges can be addressed. The elements for strengthening M&E in the condom strategy are intended to fit precisely within the NHS MEF. The design of targeted condom promotion and distribution ('campaigns and messages') identifies specific MARPs, and anal sex; and the coordination of procurement, supply and distribution under the 'total market approach' has potential to ensure coherence of distribution.

It is important, however, that the CCP is integrated into the larger Continuum of Prevention and Care (CoPC).

Development of a coherent and comprehensive framework for the condom-based interventions of the NHS will allow for more realistic setting of targets. The IRT has suggested that some of these targets are amended (see Annex 1), but given the lack of data, these are suggested tentatively.

3.2.2. Gender-based violence: Strategic Objectives 2.1.2-2.1.4:

Relevance

Gender inequality and GBV are serious social and development concerns in PNG. All HIV and AIDS interventions are carried out against a background of high levels of family and sexual violence. Addressing GBV in HIV and AIDS interventions can play a specific role in preventing violence as a result of diagnosis; preventing HIV infection as a result of sexual assault; and providing sexual assault services for female sex workers, MSM and transgendered people, who have a higher rate of sexual assault than women generally. Hence, addressing GBV is a potentially important part of the PNG HIV response. Fear of violence also hinders access to HIV testing and to care and support. In some circumstances the consequences to the individual of being diagnosed with HIV, onset and progress of the illness can result in further violence and

[6] This accounts for the fact that in Thailand HIV prevalence levels were always very different between high- and low-cost sex workers; similarly in Cambodia between 'direct' and 'indirect' sex workers.

stigma and discrimination. In PNG, MSM and transgender are not recognised as gender categories, are often seen as “not real men” and experience GBV especially in intimate partnerships or sex work circumstances or just by being “different”. Further, the implementation of this strategic objective is in line with the NHS guiding principle of recognising groups at special risk including MSM and transgendered persons. It is suggested that HIV and AIDS programs are likely to be more effective if they integrate responses to issues of GBV.

The draft National Strategy to address Family and Sexual Violence developed with technical and funding assistance from the PNG-Australia HIV and AIDS program must be progressed further. NACS could in theory, facilitate the process. However the IRT notes that there is no comprehensive multi sectoral strategy to address GBV, and that neither NACS nor NDoH appear to have the capacity or strong mandate to lead and facilitate implementation of activities to reduce GBV. The NHS calls for activities to identify and address barriers to reducing GBV (for example, by appointing trained female magistrates in village and district courts); the IRT feels that while this is important, such activities would be better placed with the Law and Justice and Community/Social Development Sectors.

The IRT reached a similar conclusion in relation to the intention of the NHS to ‘develop and support interventions that address the environmental and social conditions that increase violence against women and girls, such as tribal fighting and compensation claims.’ This activity is particularly relevant for the current high prevalence areas in the highlands because tribal fighting, and compensation claims are high. But again, this may be beyond the scope of the health sector, and NACS. Provincial administrations could pursue this within their service provisions in the Law and order sector response and community leaders at District and LLG levels. Women’s groups can also be used as partners especially at the community level.

Other organisations such as the Family and Sexual Violence Action Committee (FSVAC) are implementing more effective activities in this area; but these are limited. There are 15 family support centres scattered around PNG established and managed by FSVAC and NDoH and some Civil Society Organisations. These are located in NCD (1), ARB (2), Eastern Highlands (1), Sandaun (1) Simbu (2), Western Highlands (1), Morobe (1) East Sepik (2), Milne Bay (1) Western (1) Southern Highlands (1). More centres are required. While the IRT recognizes that addressing GBV is important, the team concluded that this strategic objective goes beyond the HIV response. The NHS objectives for GBV are unlikely to be achieved unless far more work is done on GBV in other sectors.

Progress toward targets, coverage and quality

There has been some progress, however: BUPNG works with Tru Prens (an organization of women living with HIV) and its district partners to address GBV as part of reducing stigma and discrimination in the community against those infected with HIV and their children and encouraging HIV positive mothers and other women to go for testing and treatment. Other organisations including CHASI, PSP, Anglicare, Save the Children (SCi), address HIV as a consequence of sexual violence through providing Post Exposure Prophylaxis (PEP) to prevent HIV transmission as the result of sexual assault. SCi has also been active in advocacy on child sexual assault. PNG DLA provides free legal aid to FSV survivors who are now the majority of their case load.

While many clinical and non-clinical service providers and partners are aware that GBV is important as both a cause and consequence of HIV and AIDS, ensuring this is recognised within the continuum of care model is vital.

There has also been some work to include GBV in the focus on MARPs. For example, Poro Sapot has commenced work in this area and has received recognition and

support to expand this work, including with transgender persons. Catholic Health services and HIV and AIDS care, treatment, support services provide some GBV services. These will continue because they are inclusive in their duty of care. Tingim Laip is also working with MARPS especially in building their capacity using the step method and Susu Mamas outreach to address loss to follow up due to violence, stigma and discrimination. The two Catholic Men's Health Clinics reached 3061 men in 2012, up from 1487 in 2011. This is important, given the generally lower health seeking behavior amongst men in PNG. The IRT did not find evidence of GBV services in the government health facilities.

There are many actors and factors beyond NACS and NDoH and all partners in the key implementers' network were expected to work together, coordinated by NACS and NDoH in achieving these strategic objectives. NACS and NDOH have not been successful in facilitating effective implementation of these strategic objectives. The major activity areas of the objectives are relevant at a broad macro level to HIV prevention, but may not be as effective within the limited context of the HIV response.

3.2.3. PPTCT: Strategic Objectives 1.2.1-1.2.5

Relevance

The five strategic objectives 1.2.1-1.2.5 are all relevant and appropriate to the implementation of PNG's PPTCT program and should be retained. To date GoPNG and partners have prioritised the scale up of PPTCT services in high prevalence provinces and settings. The provider initiated testing and counselling (PITC) component of the PPTCT program has been scaled up in more geographic locations than have access to ART for pregnant women, which is considered by the IRT to be a pragmatic and appropriate program approach.

The further scale up of PPTCT in PNG needs to be carefully planned to ensure that it remains targeted and relevant to PNG's HIV response. HIV testing in ANC is an important part of HIV surveillance and it is feasible that PICT could be scaled up widely and in as many ANC settings as possible without creating a large burden on an already constrained health system. It is highly relevant for high prevalence provinces to decentralize the PPTCT program and integrate the full range of PPTCT interventions into health facilities where ART is provided. However it is likely neither to be relevant or cost effective to decentralize all components of PPTCT programs to the district level in low and medium prevalence provinces. In low prevalence settings ART/delivery/EID and follow could be provided at provincial centres (or cluster district health centres).

Progress toward targets, coverage and quality

Implementation of the five strategic objectives 1.2.1-1.2.5 has resulted in an impressive scale up of PNG's PPTCT program, particularly as relates to counselling and testing of pregnant women. Antenatal care (ANC) services are provided in 724 health facilities around PNG. Of these, 316 (44%) sites provided PPTCT services in 2012. The scale up of PICT and point of care (POC) testing has greatly improved access to ANC testing and assisted the scale up of PPTCT services. One of the biggest constraints facing PNG's PPTCT program is the lack of universal access to ANC services (estimated at 79% for one ANC visit and 55% for four ANC visits-UNFPA) with only 55% of pregnancies being supervised by skilled health personnel.

Figure 6: Number of ANC sites reporting HIV testing (NDoH HIS 2012)

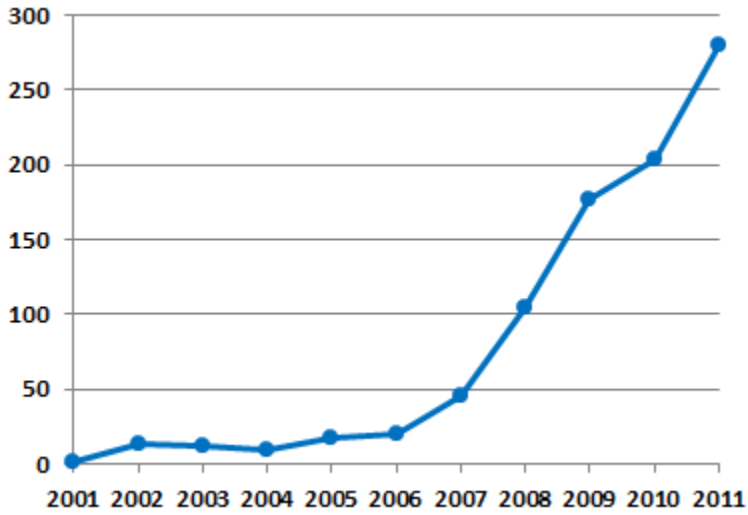
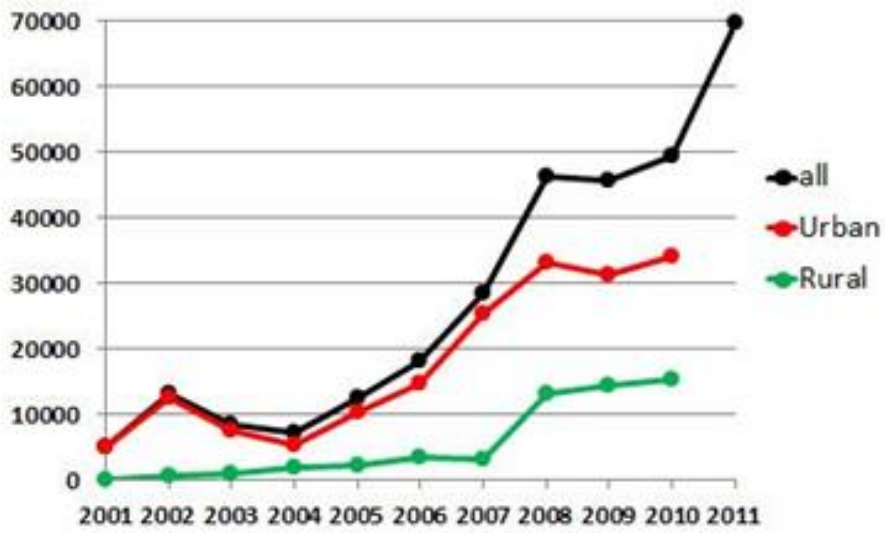


Figure 7: Number of HIV tests performed at HIV testing (NDoH HIS 2012)



Most sites reported high uptake of PICT in ANC with a reported increase in males accessing HIV counselling and testing (HCT) through referral from PPTCT services. The IRT saw evidence of good linkage and integration of PPTCT into MCH services in PNG. Early infant diagnosis is available in all high prevalence provinces which is an enormous achievement and likely to go a long way in improving survival of HIV infected infants initiated on ART. PNG has recently revised and rolled out its PPTCT guidelines to be consistent with 2010 WHO international guidance and is recommending life-long ART for pregnant HIV positive women. No stock outs of vital PPTCT commodities (test kits and ARV drugs) were noted over the past 12 months. Some delays in the development of the PPTCT training curriculum were reported to the MTR. However overall, capacity building efforts appear to have been successful and there is a great deal of enthusiasm for the PPTCT program at provincial and district health services. Mentoring and supportive supervision for PPTCT is being provided by regional HIV clinicians, CHASI (National Catholic Health Services) and NGOs including CHAI (Clinton Health Access Initiative) who have been very successful in supporting the scale up of PPTCT in WHP and EHP. A focus on shifting supervision and mentoring of the PPTCT program to other high prevalence settings with less infrastructure and capacity was recommended by several health workers from Enga province.

Family planning services do not appear to be provided in PPTCT or HIV services which is a major gap in the HIV and PPTCT program, particularly as health workers reported

seeing many 'repeat' PPTCT clients. The MTR notes that contraceptive prevalence is low (26%) in PNG (UNFPA) with a total fertility rate of 4.1 – highlighting a general lack of family planning service uptake for both HIV and non-HIV affected women. Family planning is an important HIV prevention intervention and also has a major impact on reducing maternal and infant/under-5 mortality and needs to be integrated in PPTCT and HIV services.

It is unclear whether men and women from MARP/KAP are accessing PPTPT services with several health workers reporting their perception that such individuals face significant barriers in accessing services. Women who partake in sex work and transactional sex are at risk of becoming pregnant and it is plausible that they face barriers to accessing PPTCT services. Male KAP/MARPs also need to be targeted so that they are aware of the risks of transmission to their partners and babies. The efficiency of PNG's PPTCT program could be increased by utilizing strategies to target these KAP/MARPs (and their partners), engaging them in care so that they know their status, have access to a range of family planning options and can enrol in PPTCT programs as required.

High rates of loss to follow up (LTFU) of women on ART in the post- partum period were reported by health workers interviewed by the IRT. This was also found in non-pregnant women and men who have started ART in a non-PPTCT setting. The reasons for high rates of LTFU are likely to be multiple and complex – they are related to geographic location, poverty, disclosure issues, health beliefs as well as the fact that mothers and infants are often followed up in different locations.

3.3. Priority Area 2: Counselling, Testing, Treatment, Care and Support

Two of the Top Ten interventions for the NHS are related to counselling, testing, treatment, care and support. These two interventions are:

- Significantly increase availability of point of care (POC) rapid testing with an emphasis on PICT in STI and TB services
- Increased access to adult and paediatric antiretroviral treatment (ART) and opportunistic infection (OI) and tuberculosis (TB) management at the District and local level in high prevalence provinces. (This does not preclude ensuring that ART is available in all other provinces.)

Currently the management of STIs is not covered under the NHS Top Ten Interventions. Given the high burden of STIs in PNG and the increased risk of HIV transmission related to untreated STIs, the management of STIs in people living with HIV/KAP and MARPs is an important HIV prevention intervention in PNG and is thus included in this report.

3.3.1. Strategic Objectives 1.1.3, 1.1.4, 1.1.5, 1.1.7 and 1.1.10: Counselling and Testing

Relevance

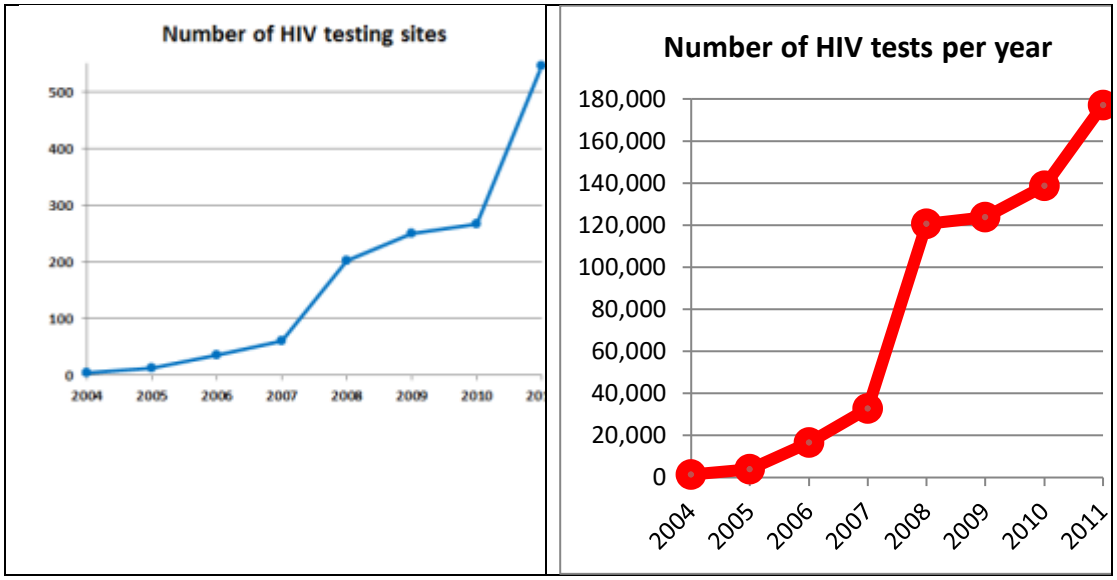
The five strategic objectives in the NHS relating to HIV counselling and testing are highly relevant. These include increasing access of the general population in urban settings and high prevalence rural settings to HCT, ensuring KAP have access to HCT that meets their needs, linkage and coordination between HCT and other services and scaling up POC testing backed by quality assurance (QA). All five strategic objectives are critical and should be retained over the remaining two years of the NHS. Priority should be given to an increased focus on targeting the provision of counselling and testing to those most likely to have HIV infection. Furthermore the scale up of PICT in

preference to developing more traditional stand alone 'VCT' sites should be prioritised as this is a pragmatic, accessible and cost effective way of providing counselling and testing services in PNG.

Progress toward targets, coverage and quality

Between 2009 and 2011 there has been an impressive scale up of HIV counselling and testing services. The availability and scale up of POC and PICT testing has contributed substantially to both the scale up of testing sites and the number of tests in PNG.

Figure 8: Scale up of testing sites and tests/year in PNG



There has been significant strengthening of health system capacity to provide HCT services including PICT and use of the POC rapid test in high prevalence, rural provinces and several urban settings. PICT is provided in all health facilities doing HCT – including ANC, STI and TB clinics. There were several examples identified by the IRT of PICT being provided in hospital based out-patient departments (OPD), FP clinics and in Accident and Emergency (A&E) departments. Some providers reported using PICT on mobile patrols and outreach.

A quality assurance (QA) program has been rolled out for POC testing with each 20th sample being sent out for confirmatory testing using Dried Blood Spot (DBS) technology - to date the Central Public Health Laboratory (CPHL) reports no major issues with the QA system although the MTR was not able to access data to confirm this.

The major issue impacting on the current effectiveness of PNG's counselling and testing program is related to the targeting of HCT services. Much of the scale up of HCT in PNG over the past two years has been related to the scale up of PICT in ANC. In 2011, 39% of the total HIV tests performed in PNG were done in ANC with a very low yield of newly diagnosed HIV infected women (0.5%). On the other hand, testing rates in STI and TB services - which yield a much higher proportion of newly diagnosed HIV clients (3% and 5% respectively) - remains low with 13% of STI clients and 25% of TB clients having a record of one or more counselling/testing episodes. This represents a massive missed opportunity to find HIV infections, and provide care and support and secondary prevention. The reasons behind poor testing rates remain unclear with health care workers reporting that in particular STI clients refuse testing. Low rates of testing amongst STI clients was also noted by the PASHIP evaluation,

and this was considered to be possibly due to attitudes of health providers, and to client refusal for other reasons. This evaluation also suggested that the reluctance of health workers to offer testing may be related to the entrenched HCCT approach to testing which is time consuming and requires lengthy pre and post-test counselling. Increasing the availability of PICT using POC rapid testing in STI and TB services in PNG is needed urgently to improve the efficiency of PNG's counselling and testing strategy.

There is also evidence that the population in PNG continues to face barriers in accessing HIV testing when they are asymptomatic (in the time period between being infected and becoming unwell as a result of HIV infection) with 36% of new HIV infections in 2011 being detected in in-patient facilities - a likely indication of people presenting with advanced HIV related disease and immunosuppression. This could be due to a myriad of complex reasons; being unaware of individual risk of infection, having no knowledge of the benefits of testing/treatment, being fearful of disclosure or simply not knowing where to access testing. This represents another missed opportunity to initiate ART before the onset of advanced clinical disease when PLHIV are relatively well but still meet the guidelines for commencing ART (i.e. their CD4 counts are around 300-350 cells/mm3) . Initiating ART with higher CD4 counts results in better clinical outcomes and is also important in preventing HIV transmission. Furthermore, enrolment in pre-ART care for those not eligible for ART offers benefits relating to both individual HIV care (TB screening, regular CD4 cell count monitoring, management of opportunistic infections) and prevention of transmission (STI screening, condoms, PPTCT) .

As discussed above much of the scale up of HCT has occurred within PNG's PPTCT program thus targeting the general population. It is unclear whether higher risk KAP/MARPs are accessing HCT – data from the uptake of testing in STI services would make us believe they are not. Across the board the MTR heard the perception that various KAP/MARPs – particularly sex workers and MSM do not access clinical services, particularly those based in the government or faith based supported health care settings. It is not clear whether this is due to the fact that KAP/MARPs do not know or understand the value of knowing one's HIV status and accessing treatment or whether barriers to accessing services are so great they are opting to not attend. Structural barriers to accessing services were also noted by the IRT with several high volume integrated HIV/STI/HCT clinics capping the number of HCT clients that they see per day and/or only offering HCT on particular days due to human resource constraints.

Currently there appears to be limited opportunity for KAP/MARPs to access HCT in the locations in which they live. Some NGOs providing prevention outreach in the larger urban locations (Port Moresby, Mt Hagen, Goroka, Lae, Madang), are making oral or paper based referrals for clients to attend HCT services. Whilst an oral or paper based referral can alert an individual of the need for testing and provide information about testing locations it does not address barriers that KAP/MARPs face when accessing testing services in the hospital/clinic setting. With the availability of POC testing and PICT – there is ample opportunity for health care workers to provide mobile counselling and testing services where KAP/MARPs live, rather than waiting for them to access counselling and services in a hospital/clinic setting. If this is not possible, facilitated referrals to HCT services using peers and volunteers could be further explored.

3.3.2. Strategic Objectives 2.1.2, 2.1.3, 2.1.10: Treatment and Care

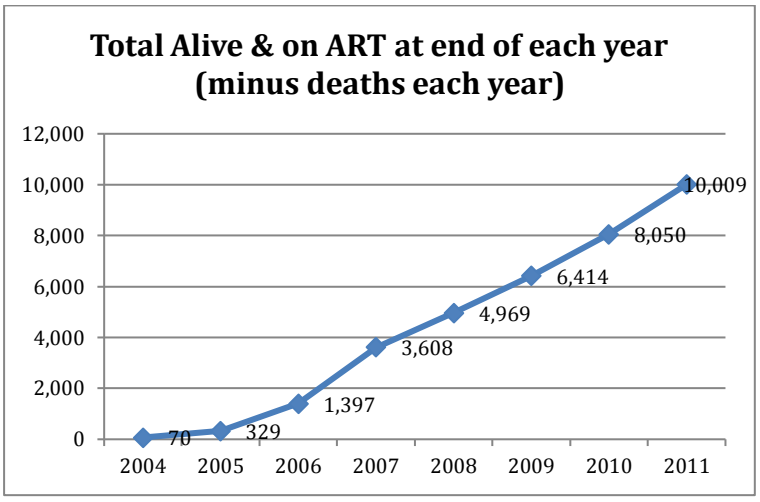
Relevance

Strategic objectives relating to this outcome include expanding ART to the districts and local level, providing quality management of opportunistic infections and supporting long term adherence to ART. The outcomes and activities related to treatment and care are highly relevant in contributing to PNG's HIV program– with ART not only reducing the morbidity and mortality of adults and children living with HIV but also having a vital role in preventing transmission and reducing the number of new HIV infections in PNG. It is recommended that all strategic objectives be retained for the remaining two years of NHS implementation. The further scale up of HIV clinical services including ART needs to be driven by improved data collection, management and planning to carefully target locations where services are needed. The development of packages of core HIV prevention and care and treatment services that can be tailored to local epidemics, geography, infrastructure and access to services would support planners and health managers to undertake this process in a consistent and efficient way.

Progress toward targets, coverage and quality

The scale up of HIV treatment for adults has been impressive with adult ART being available in 87 health facilities (including 20 district health facilities in high prevalence provinces) in PNG. The roll out and scale up of paediatric ART has been a little slower – a common pattern for most countries in the Asia-Pacific region. Currently paediatric ART is provided at 32 sites across PNG and much of this is at provincial referral hospitals. However, the decentralization of paediatric ART to the district level has commenced and the majority of health care providers interviewed by the MTR team indicated the willingness to provide paediatric ART services – but requested capacity building and support to do this. Given the geographical challenges of PNG it is entirely relevant and appropriate for paediatric ART to be provided at the district level in sites where there is capacity and enough children infected with HIV on ART to make this feasible and efficient.

Figure 9: Cumulative number of PLHIV on ART by year



By the end of 2012 health workers in PNG had initiated a total of 11,764 PLHIV on ART, covering 71% of the estimated 16, 553 PLHIV eligible for ARV treatment. This level of coverage indicates that the scale up has been effective and has targeted geographical areas where the majority of treatment is needed. Crude analysis of program data revealed that 88% of those who tested HIV positive during 2011 registered for care services in the same year with approximately 60% of these starting ART. The numbers of children on ART are relatively small which is to be expected given the relatively low prevalence of HIV in the general population. In 2011 a total of

125 infants were registered for HIV care and 101 (81%) were started on ART during this year. These data indicate a highly effective service with good coverage and excellent uptake of care. In 2012 PNG successfully developed and disseminated updated HIV care and treatment guidelines – adapting WHO's updated international guidance on adult and paediatric HIV care and treatment including revised first and second line ARV regimens.

ART programs have been successfully decentralized in PNG and 20 district level sites now provide ART. The majority of HIV care is provided by nurses and community health workers (CHWs) with some supervision by doctors – this model is practical and appropriate to the PNG context. Capacity building has been systematic and of good quality – guidelines, standard operating procedures (SOPs) and job aides were noted to be in use at all sites visited by the MTR. Supervision and mentoring is provided by regional HIV medical officers. Several health workers reported to the MTR that these need to be scaled up in high prevalence provinces with less capacity (e.g. Enga and Simbu).

Health workers and program managers reported that in 2012-2103 PLHIV are presenting earlier and less immunosuppressed compared to previous years (although there are no quantitative data to back up this perception). To the extent that this is occurring, it may be due to increased testing and increased visibility and access of HIV services. The scale up of PIMATM CD4 testing has made the decision to start ART easier and more efficient – there appear to be few delays in starting PLHIV on ART in PNG. A major improvement in the ART supply chain was reported to the MTR with no sites reporting stock outs in the previous 6 months. The ART supply chain and distribution system is highly centralized which is appropriate for the relatively small numbers of ARV drugs that are procured and distributed – however it is also noted to be expensive, utilizing TNT couriers to distribute ARV and OI drugs on to individual health centres on a 1-3 monthly basis.

An indicator of the quality of an ART program is the rate of retention of PLHIV on ART at 12 months. This is reported by NDoH to be 78% although it is unclear whether this reflects the real situation in PNG as there are a number of issues with the collection of ART cohort data in PNG. It was apparent to the MTR that the NDOH electronic ART database is not being used in all sites – mostly due to lack of staff to do the data entry. In sites not using the database there is no paper-based system (e.g. the WHO ART cohort paper-based register system) to follow cohorts of those started on ART so data collection is problematic. The MTR found extremely high rates of LTFU at the site level – evident upon reviewing clinic logbooks and examining the numbers of PLHIV ever started on ART and comparing this to the numbers of PLHIV continuing on ART at the same site. At most sites visited by the MTR only 50-60% of those who ever started on ART appeared to be continuing ART at the same site. Health workers were not able to report on whether this was due to death, loss to follow up or due to patients transferring their care to different clinics. Several health workers reported their perception that it is common practice for PLHIV to register and access ART using different names at multiple ART sites without formally being registered as a 'transfer'). The extent of LTFU needs to urgently be ascertained as it has serious implications for the success and sustainability of PNG's care and treatment program – noting that recent data from CPHL has documented transmitted resistance in ART naïve PLHIV in Port Moresby at 15%.

As discussed in the section on PPTCT and HCT, health workers reported their perception that KAP/MARPs are under-utilizing clinical HIV services, particularly government and some faith based supported services. Some of this was perceived to be due to self-stigmatization and some due to stigma and discrimination in health facilities (although this was reported to have improved over the past decade). However,

a more fundamental issue is that of the general lack of coordination and linkage between prevention services provided by NGOs and CBOs for KAP/MARPs at the community level and the clinical services that they require. Access of vulnerable populations to clinical services usually needs facilitation and support. NGOs and CBOs who work with KAP/MARPs in the community are well placed to fulfil these roles. Facilitating access to clinical services for vulnerable populations generally requires more than providing referral information on a slip of paper or making a phone call. Access to services may also be exacerbated by the fact that several high volume clinics are only providing specific services on specified days of the week in an attempt to control client flow and work load. A detailed examination of how HIV services are currently provided to clients would assist in the identification of inefficiencies in client flow and possibly allow for the development of more efficient work practices.

There are a number of issues related to the management of TB-HIV co-infection. TB is one of the commonest OIs seen in PLHIV in PNG. Testing rates for HIV in TB patients remain low (25%), health workers reported difficulties in diagnosing TB in PLHIV and only 4% of HIV-TB co-infected patients are treated appropriately for both concurrent HIV and TB. The rate of use of isoniazid prophylaxis is extremely low at 25% and has not improved over the past two to three years. Health workers reported to the MTR that they lack confidence in treating TB - HIV co-infected patients and are reluctant to use Isoniazid prophylaxis. They also reported issues with infection control – lacking the infrastructure and equipment to sequestrate and manage clients with potential TB infection. The MTR heard that NDoH and implementing partners are aware of these issues and have developed a road map to improve the efficient management of TB-HIV co-infection in PNG including plans to:

- Develop national TB-HIV collaboration guidelines and clinical care algorithms
- Ensure 100% HIV testing for TB clients
- Ensure screening of 100% HIV clients for symptoms of TB at each visit
- Prescribe TB drugs in the ART clinic and scale up Isoniazid prophylaxis
- Set up local level TB case-management/coordination teams
- Co-locate HIV and TB service providers, and build service capacity.

The MTR supports the road map and also recommends that the national TB registers be updated to more clearly include provision to document whether a client has had PITC and the test result.

3.3.3. Strategic Objective 2.3.1: STI services

Relevance

Currently the management of STIs is not covered under the NHS Top 10 Interventions despite being a major health problem in PNG and having a well- documented relationship with HIV transmission. While STI data are limited, there is sufficient information to show that both prevalence and incidence of STIs is high. In 2010, 72,494 STI cases were reported to the NDoH using syndromic diagnoses (2010 NHIS). More than two thirds (69%) of cases were female. Most cases were from the Highlands provinces (70%) with the majority of the remainder being from the large towns (Port Moresby, Lae and Madang). STI prevalence data show very high rates of infection among both community- and clinic-based samples of men and women, and among female sex workers. There is little information about the rates of STIs among MSM and male sex workers.

Figure 10: Pooled prevalence estimates of STIs by population (meta-analysis)*

STI	Community-based males	Community-based females	Clinic-based-males	Clinic-based-females	Female sex workers
Chlamydia	21.2	24.8	32.1	33.7	26.1
HIV	1.8	2.6	6.6	12.0	11.8
Herpes	22.8	18.4	no data	no data	no data
Gonorrhoea	10.0	16.3	74.3	27.2	33.7
Syphilis	12.9	7.9	5.0	7.9	31.1
Trichomoniasis	12.3	40.8	16.4	23.0	39.3

*PASHIP Evaluation report (November 2012)

Given the high burden of STIs in PNG and the increased risk of HIV transmission related to untreated STIs, the management of STIs in PLHIV/KAP is an important HIV prevention intervention in PNG. The MTR strongly recommends that the management of STIs be considered a priority activity over the remaining years of the current NHS and has thus included it in this review.

The NHS strategic objective related to STI services is sound although as an HIV intervention it needs to be better targeted to ensure that it is relevant to HIV programming. For example the indicator could be reconfigured to “Free quality STI screening and management is accessible in all facilities where HIV services are provided”. Furthermore, PNG needs to complement its current focus on STI clinical management using the syndromic management approach with a more public health approach focused on detecting and managing asymptomatic STIs among particular population groups and major population centres. This is outlined in more detail below.

Progress toward targets, coverage and quality

Like many resource limited settings around the world, PNG has been utilizing the syndromic management approach to STI management for many years. There is no doubt that PNG has made great advances in managing STIs using the syndromic approach which enables health care workers to treat symptomatic STIs without requiring access to diagnostic testing. The PASHIP review documented that, by and large, STI management was of good quality in PNG. However, the review documented concerns about the effectiveness of the syndromic management approach as the sole approach to STI management (and HIV prevention) in PNG. The MTR share these concerns. There are a number of reasons for this. Asymptomatic infections are common in PNG and require more active case-finding. Both asymptomatic and symptomatic STIs continue to be considered major drivers of HIV transmission and acquisition (Cohen 2010, Mlisana 2012). Vaginal discharge has been recently documented to be a poor predictor of STIs, and studies have found that asymptomatic infections were more likely to be associated with HIV acquisition (Mlisana 2012). Further, behavioural data from PNG point to significant rates of unprotected anal sex between heterosexual men and women. Many rectal STIs are asymptomatic and women (and men) are unlikely to report anal symptoms to an STI clinic as anal sex is not a practice that is openly discussed in PNG. Thus a program that is solely dependent on the syndromic approach will be limited in its ability to control STIs and realise the full programmatic potential to impact on HIV prevention (PASHIP). The PASHIP evaluation also found that awareness of the need and capacity to conduct ano-rectal examination was low and that generally health workers see anal sex as a sensitive topic. Few health workers are trained in the use of proctoscopes and in fact

nurses and Community Health Workers who provide most STI care in PNG are not trained in ano-rectal examination in their qualification level training.

A number of sites reported that they did not have access to syphilis test kits or that they were frequently stocked out. Syphilis is a serious, curable, often asymptomatic STI that has a well-documented relationship with increased HIV transmission and can be detected and treated at minimal cost. An increased focus on screening and treating syphilis in PLHIV and those at risk for STIs is likely to be a cost-effective public health intervention that has positive benefits for HIV prevention in addition to a reduction in morbidity and mortality in those who are not infected with HIV.

Access and demand for STI services is low in PNG despite the well-documented large burden of STIs. Review of service statistics at the sites visited by the MTR found that in general there is less demand (and less service provision) for STI services compared to HIV/HCT services. In general STI service provision accounted for 10-15% of service occasions provided in fully integrated sites. Several health care providers reported their perception that HIV services have 'overwhelmed' STI services. As previously mentioned, several high volume integrated clinics were found to be capping the number of STI clients that they would see on any one day or only offering STI services on particular days – potentially limiting access to services. This issue – of how STI services can be provided efficiently in PNG - was also raised in the PASHIP evaluation which outlined the pros and cons of integrated and non-integrated STI services.

The majority of health workers interviewed by the IRT believed that KAP/MARPs are not attending STI services. This is a great challenge for PNG and raises the question of how best to strike the right balance between working with the population as a whole and intensifying work with groups at higher risk. In all likelihood a mix of sexual health service delivery models and possibly a mix of stand-alone and integrated STI clinics is needed to meet the needs of both the general and the high risk population in high HIV (and STI) prevalence provinces. The MTR urges the GoPNG and NDoH to consider implementation of the recommendations from the recent PASHIP evaluation. This evaluation recommended that PNG complements its current focus on STI clinical management using the syndromic management approach with a more public health approach focused on detecting and managing asymptomatic STIs among particular population groups (e.g. female, male and transgender sex workers, MSM, clients of sex workers, mobile men with money) and in particular geographic locations (e.g. high STI/HIV burden provinces, economic enclaves; and major population centres such as Port Moresby, Lae, Madang, Goroka, and Mount Hagen).

3.4. Priority Area 3: Systems strengthening

There are three Top Ten Interventions included in this priority area, covering nine (9) Strategic Objectives. The three interventions are:

- Strengthen and expand second generation surveillance systems (biological and behavioural surveys, case reporting and STI surveillance)
- Significantly increase technical assistance and organisational capacity development at the sub-national levels for key organisations
- A strengthened and functioning National AIDS Council Secretariat (NACS) and Provincial AIDS Council Secretariats (PACS), with an initial emphasis on PACS in high prevalence provinces.

3.4.1. The surveillance system Strategic Objectives 1.1.1, 1.1.2, 1.2.1, and 1.2.2:

Relevance

Strengthening strategic information systems (SIS) remains an important priority for PNG. Continued effort is required to gather and make best use of data from a range of sources, including epidemiological surveillance using routine administrative datasets, behavioural and bio-behavioural surveillance studies, as well as programmatic data for monitoring and evaluation of intervention delivery. To be successful the national SIS requires functioning and well-coordinated components at all levels, from service providers, district and provincial stakeholders, to stakeholders at the central or national level.

Epidemiological monitoring systems are a critical component of the HIV response, necessary to inform programming and resource allocation for effective prevention. Over the last ten years major progress has been achieved in building a national surveillance system, including the rapid expansion in the number of sites reporting HIV testing data. In particular, an increase in antenatal clinics providing HIV testing for pregnant women from 14 in 2002 to 315 in 2012 has led to a far more complete understanding of the epidemic than was previously possible. There remain, however, significant challenges to maintaining, and developing further, a functional national surveillance system. Such a system requires consistent data collection by service providers, timely and accurate reporting of these data for collation at the provincial and national level, and the capacity to analyse this information and communicate relevant findings to stakeholders. For such a system to operate successfully there must be sufficient capacity, supervision and support at each level of the system. This is recognised in the NHS through the attention given to the development of Provincial Monitoring, Evaluation and Surveillance Teams (ProMEST). These teams have the potential to play a key role in strengthening the overall surveillance system, being well placed to provide supervision of data collection by service providers, to monitor provincial level changes, and to ensure that surveillance activities and analysis has relevance to programs and policy locally.

Ongoing behavioural surveillance is necessary to characterise HIV risk, better understand the drivers of the epidemic and to determine the impact of interventions. For this type of surveillance there are a number of methodological options available including general population (e.g. household) surveys and monitoring of sentinel sites and key populations. As recognised in the NHS, in addition to adequate funding, skilled researchers are required to carry out these activities. The national household integrated bio-behavioural surveillance survey (IBBS) that had been planned to take place in 2012 required a substantial level of funding as well as sizable trained workforce engaged for a relatively short period of time. Considering the scale of financial and technical commitment required and in an environment of competing demands, it is uncertain whether or not this activity still represents the best investment of resources for the information it is likely to yield, especially as it will only be a single time point and not useful for tracking program impact. Bio-behavioural surveillance surveys among those groups experiencing greatest levels of risk are also included as priority activities in the NHS. To enable the monitoring of trends these surveys must be repeated at different time points, and should be conducted in multiple locations to allow for more generalizable findings.

Progress toward targets, coverage and quality

From the information available to the MTR team it would appear that relatively few programed activities have been completed, major targets have not been met and only modest progress has been made since 2011 towards achieving the objective of strengthening strategic information systems (SIS).

Efforts to strengthen the overall SIS require effective coordination and support of the system's various components. Currently both NACS and NDoH have responsibilities for different parts of this system with the former primarily responsible for monitoring

and evaluation (M&E) systems and the latter for STI and HIV surveillance. While there does appear to be substantial overlap in these responsibilities, the two systems are structured to operate separately, with many service providers required to report information through both mechanisms, and with limited available resources and capacity divided across these parallel systems. Merging of the two national multi-sectorial technical working groups, the Surveillance Technical Working Group and the Monitoring and Evaluation Technical Working Group, to form a single National Strategic Information Working Group (SITWG) in 2012 has theoretically provided some potential for these two interrelated streams to be more productively consolidated and better aligned their function under the objectives of the NHS. However, it appears that the activity of the SITWG since its formation has been minimal.

A National Surveillance Plan was developed to guide the implementation of activities in pursuit of the surveillance related objectives of the 2011-2015 NHS. This very detailed and comprehensive plan anticipated sustained levels of funding and technical capacity within NDoH and other key partners. A number of critical changes occurred, however, that substantially limited the ability of NDoH and other stakeholders to implement the Plan. Key positions within the STI & HIV Surveillance section of NDoH have remained vacant for an extended period of time, including the position of epidemiologist or supervisor responsible for the system. As a result the capacity of NDoH to undertake surveillance related activities has actually fallen since 2010. In response to this situation a National STI/HIV Surveillance Meeting was held in March 2012, at which the recommendation was made to suspend the National Surveillance Plan until the end of 2012 and to prioritise a limited number of the most important surveillance related activities. These included: 1) collection of routine HIV testing data from ANC sites; 2) Collection and analysis of HIV case notification; 3) Maintenance of the ART monthly reporting database and 4) Prioritisation of collection and verification of data from PPTCT sites. It was also recommended that the situation be reassessed at the end of 2012 and for a revised plan to be adopted in line with available capacity. The situation of reduced capacity has persisted, and the STI & HIV Surveillance section remains without an epidemiologist or supervisor. Basic data collection activities have continued, but the Department has been unable to devote as much time as was previously given to follow up on missing reports from service providers. External technical support was obtained to contribute to the preparation of data for the 2011 Annual Report, but the capacity to analyse the data from the surveillance system remains limited. The meeting that was recommended to take place at the end of 2012 to provide guidance on surveillance activities and whether or not the National Surveillance Plan should be reinstated did not occur.

ProMESTs have now been established throughout the country, and it is understood that technical officers with responsibility for data management have been appointed in most, if not all, provinces. The ability of ProMESTs to collect, analyse and report on key surveillance information, however, is unclear; the comprehensive review of ProMESTs, listed as a major activity in the NHS, has yet to be conducted.

A sustainable model for behavioural surveillance has not yet been established in PNG and there has been very little in the way of behavioural surveillance aligned with the NHS conducted since 2011. The National Research Institute (NRI) was previously responsible for undertaking behavioural surveillance surveys (BSS) under the National Surveillance Plan. NRI produced a series of reports on BSS among key populations including: highway truck drivers; high risk youth in Vanimo Green District; rural development enclave workers; women who exchange sex in Mt Hagen; women attending Port Moresby General Hospital Antenatal Clinic; men and women attending Lae Friends STI Clinic. None of these surveys has yet been repeated in similar populations or locations. In addition, data for all these studies was collected prior to 2011. While these studies provide a valuable set of baseline data against which future

studies might be compared, none allow for analysis of changes in behaviour over time or to observe the impact of interventions. Among the twenty-three National indicators for the top ten interventions within the NHS Monitoring and Evaluation Framework, eleven rely upon data gathered through BSS; because no suitable studies have been undertaken these indicators cannot be reported on. NRI is no longer funded to undertake further BSS, and with the exception of ad-hoc BSS conducted by NGOs, there appear to be no studies among key populations planned in the immediate future. There are, however, plans to undertake a most-at-risk-population size estimation and mapping exercise which may contribute to ongoing efforts to investigate these populations.

A national general population integrated behavioural surveillance survey (IBBS) was planned as a major activity under the NHS. Jointly financed by the Government of PNG, AusAID, NZAID, ADB and World Bank, the IBBS was to be carried out by FHI360, contracted as the international management organisation. The survey itself was to be conducted in 2012 but was postponed due to the general election and other factors. Subsequently, substantial increases in the estimated costs of undertaking this extensive survey resulted in a decision to suspend this activity. At the time of the MTR it was unclear whether or not the IBBS would proceed.

The current separation of responsibilities within the strategic information system, whereby NACS has primary responsibility for M&E and NDoH for epidemiological surveillance, appears to be an inefficient division of labour across overlapping tasks. This inefficiency is amplified by the current technical capacity limitations. The SITWG has the potential to promote the consolidation of these functions.

Both NACS and NDoH collect programmatic data from HIV testing, prevention and treatment services to meet surveillance and M&E requirements through separate but parallel systems. In the case of some surveillance data, service providers are required to submit reports to both NDoH and the ProMEST in their province; ProMESTs do not currently routinely submit gathered data to NDoH. Rates of reporting by service providers to NDoH vary substantially, with only a minority of sites submitting data consistently and on time. While NDoH does not have the structures needed to follow up with sites not submitting reports, ProMESTs are locally well placed to make contact with service providers in their province to collect missing reports, provide support if required, collate data at the provincial level, and then pass these data on to NDoH for collation at the national level. Currently NACS is more closely involved in the development and support of ProMESTs than NDoH; improved communication and support between NDoH and ProMESTs has the potential to significantly strengthen the flow of data and strengthen national strategic information systems. If suitably trained and supported, ProMESTs also have the potential to be able to undertake analysis of data relevant to their provincial context and to inform local decision making and service delivery.

The quality of programmatic data gathered and reported also varies among sites. This is due in part to confusion over how to correctly complete the data collection forms and shortcomings of the forms themselves in being able to accurately capture relevant information. The day to day records kept by services may not map well to the monthly reporting format that they are required to complete.

The national HIV databases are an invaluable asset to the SIS but are not well maintained, evident by the difficulty experienced in fulfilling data requests made for this MTR, and the difficulty with which the NDoH and NACS data custodians had in locating a master copy of the HIV testing and case notification databases.

Data available through the existing SIS could be used more effectively. The national STI, HIV & AIDS Annual Surveillance Report contains a surfeit of data that remain relatively under analysed, and there is limited application of quality control procedures

for the reporting processes. The ability to more effectively analyse the rich data sources that are already available is constrained by the current shortage of staff and technical capacity, and by overly ambitious goals that were set for surveillance. Production of the reports in their current form represents a significant burden for NDoH; at the time of the MTR the 2011 report was still in the process of being drafted, and work on preparing the 2012 report had not yet begun.

3.4.2. Capacity development: Strategic Objectives 3.1.3, 3.1.4, and 3.1.5:

Relevance

These three strategic objectives cover strengthening the capacity of and increasing support for NGOs and CBOs. These objectives take on particular relevance and importance with the development of extensive treatment and care, where NGOs and FBOs play a very substantial role, and the two major changes in emphasis taking place within the national response: the increasing focus on MARPs, and the decentralisation of the response.

With respect to FBO/NGO treatment and care, this is increasingly building on continuum of care models. It is important that appropriate, up-to-date guidance and support is provided for this. With regard to the increasing focus on MARPs, it is important that coherent, coordinated support is provided as organisations develop and experiment with appropriate models, to avoid duplication and maximise synergies.

For the shift in government emphasis on channelling funding to Provincial and District levels, more and appropriate TA will be needed to implementing partners of PACS, DACS and major NGOs, FBOs and CSO especially with preparing budgets and developing Activity Plans that will address the specific nature of the HIV&AIDS epidemic within each location. TA will also be required to support Provincial Government and NDoH at the sub-national level to institutionalise the implementation of the NHS to match the nature of the epidemic in their districts and Province.

Progress towards targets, coverage and quality

Current partners' capacities are assessed when annual reports of funded activities and new funding proposals are being submitted to donors such as AusAID. Hence, the percentage of partners meeting the target would be about 85% with current partners. The partners at community and sub-national levels working with the big NGOs may be at 40%, thus needing more help.

There are currently 19 national and international NGOs with multi-year, multi-million Kina budget programs managed by AusAID. AusAID assesses capacities; governance processes, programmatic targets, and provides other strategic advice as part of its management of these NGOs. NGOs, FBOs and CSOs submit QAIs, annual reports and Annual Activity Plans in a timely manner. AusAID has increased the capacity of NGOs, FBOs and CBOs to access GoPNG and development partner funding through, for example, improved capacity in writing funding proposals. The 19 big NGOs funded by AusAID are in turn building capacities of CBOS. For example, Baptist Union is building the capacities of community based organisation such as Tru Fren to prepare their annual activity plans and report on them.

NHATU has responded to the new focus on MARPs, narrowing its focus to organisations working with MARPs, and shifting focus to Training of Trainers (TOTs), where training is done with people already working in relevant organisations. NHATU has adjusted the training manuals to reflect the focus on MARPs. Training is provided on the basis of requests coming in from partners. Reporting against the NHS is only on the number and type of training – not on its impact on partners' work. This will need to be undertaken to understand the real impact of NHATU's effort.

NACS, however, plays little role in this. The MTR also discovered that many strategic NGOs such as the National Council of Women and its sub-national Provincial and District and Village Women's clubs are not participating in implementing the NHS due mainly to lack of capacity. Capacity development beyond the Provincial level is minimal though it was noted that Western Highland PAC is working with Tru Warriors to build its capacity at the Provincial and District level. With the funding cut to NACS this may not continue unless the response is institutionalised within the Provincial Administration.

NACS has not developed tools for capacity needs assessment of organisations working in the HIV response at the sub-national level. However NACS and AusAID have facilitated NGO Forums, which provided partners with opportunities to share best practice and lessons learned from each other to improve their own performances.

Sub-national level partners of the Umbrella Organisations established by NACS (see next section) have not benefited much from these UOs. Only BAHA has implemented activities to strengthen its partners and is the only UOs that is functioning effectively in some areas. Igat hope is effective in having sub-national partners but has not worked efficiently with these.

3.4.3. NACS Coordination: Strategic Objectives 3.1.1 and 3.1.2:

Relevance

The NHS is accompanied by an Implementation plan and an M&E framework that creates a pathway from the NHS as a policy, its implementation, and the M&E process. The NHS implementation plan highlights broad activity areas, which stakeholders can use to guide their programs and related activities in their local contexts – and importantly, to coordinate input to ensure avoidance of duplication or gaps. The M&E framework of the NHS highlights the process and tools that can be used to monitor the implementation of the NHS and evaluate its achievements – particularly to assess where effective progress is being made. Considering the large number of partners, particularly implementing partners and service providers, and their important role in the national response, this single coordinating framework is highly relevant. It is frequently commented upon, for example, that over half of all health services are provided by non-state actors. Considering the vital role NGOs, of various sorts, and funded from various sources, play in targeting services towards where they are most needed, the coordination provided by the National Strategy is vital.

The role of NACS in managing this coordination is changing, however. Critically, the MTR found that NACS has been slow to grasp the opportunity that the government decentralization process is proposing, to significantly change the nature and role of NACS. Much of NACS' role in previous years has been to channel funding out to provinces (in the form of operation budget, grants, etc.), to stimulate and support activities at all district and community levels. This form of funding will cease, and indeed has largely dried up already with the sharp reductions in NACS' budget. Funding for activities at sub-national level will now come through provincial channels. Current funding arrangements by the National Department of Planning and Monitoring (NDPM) during the MTR interviews indicates that allocation of development funds to NACS will decrease in the next few years starting in 2013. Funding for HIV will be part of the 20% of health funding to the districts and provinces under the District Services Improvement Program (DSIP) and the Provincial Services Improvement Program (PSIP) respectively.

While NACS has recognised the importance of accessing such funding for HIV, and is working towards strengthening frameworks (e.g. The Provincial Engagement Framework, and its Sub-National Guidelines), NACS itself does not seem to have fully

recognized the significant change in its role this implies – i.e. more technical guidance, more practical coordination, more monitoring and reporting, and playing far less of a funding and driving, let alone implementing, role.

Progress towards targets, coverage and quality

The mid-term review (MTR) discovered that many stakeholders say they have not seen the NHS and hence do not understand nor participate in a coordinated manner in the response. Even where partners say they use the NHS, this is little more than paying lip service. A number of partners' strategic plans were reviewed, and few make a serious attempt to formally work within the NHS – rather simply fitting their own strategies, objectives and indicators within the three very broad areas: prevention, counseling, testing, care and treatment, and M&E. The NHS is known only to those participating in the Annual Planning Process facilitated by NACS – which for 2013, for example, excludes all partners other than NACS itself and AusAID.

Reporting against the NHS is largely absent. As noted above, NACS does not produce an Annual Report showing implementation of the NHS; nor reports against the 39 national indicators. The MTR found that while many data are collected, both service delivery data within the health system, and program and activity data by NACS itself, this appears not to be used to determine progress in implementing the NHS. For tracking resources, the only NASA conducted was for 2009-10, prior to the period of the NHS. There is thus no record of resource allocations or spending against the NHS; although it is understood that a second NASA will be conducted this year with UN support.

NACS at the national level and the Provincial AIDS Committee Secretariat (PACS) at the sub-national level are responsible for coordinating, facilitating, and reporting on the overall implementation of the NHS using the NHS Implementation and M&E frameworks as the tool. Non-state actors are the main implementers of the NHS thus far. Both the public and private sectors are now beginning to engage with the response to address HIV and AIDS in their respective sectors. Activities in the government sectors include: development of HIV&AIDS workplace policies; appointment of HIV focal persons; development of targeted information and education materials for prevention, care, support and treatment for people living with or affected by HIV ; providing information on referral pathways to clinical services and provision of male and female condoms in accessible areas in the workplace. However, the spending on HIV in these sectors cannot be captured adequately and accurately through any reporting channels. This is important if NACS wants to know the government's total spending on HIV in PNG.

Management of all the 'Umbrella Organisations' (UO) of NACS needs to be strengthened in order for them to function effectively. The UOs include: business coalition against HIV and AIDS (BAHA), church leaders against HIV and AIDS (CLAHA), Igat Hope Inc. (IHI), youth alliance against HIV and AIDS (YAHA) and PNG alliance of civil society organisations (PACSO). NACS has given prominence to them in the last couple of years to perform a crucial role to coordinate important stakeholders in the HIV response. However, many of the UOs are poorly managed and are dysfunctional. Poor management and control of the UOs will render them a liability and a source of wastage of scarce funds and other resources. Very clear terms of references, scope of work and processes for checks and balance (for both financial and program reporting) for their work need to be developed by NACS for implementation by the OUs so that they produce quality outcomes and do not go off at a tangent. NACS should allocate at least two people to be responsible for the OUs so that they feel attached to the NACS management and a 'home' where they can get technical and program support. While this is crucial for HIV programs, NACS should

understand that the UOs are registered and independent entities and have the right to exist and function independently.

Similarly, with Tingim Laip (TL): this is the largest coherent prevention intervention program in the country. It is being run by a managing contractor outside of NACS although it has an office within the NACS office complex and NACS is a member of the committee that oversees the TL program. After the recent review of the TL program it is refocusing its interventions to address the key affected populations (KAPs). NACS indicated a preference for the TL program to be under its ambit even though it has no-one to manage or liaise with the TL program and project managers. Oversight of TL by NACS should not necessarily be about financial control and program management. It should concentrate on developing an effective liaison and reporting system in order that i) NACS gets regular and updated reports from TL, and ii) NACS can provide policy and technical guidance and coordination to the TL program management on high impact interventions.

4. RECOMMENDATIONS

4.1. Re-thinking prevention

The NHS is structured around three priority areas – which makes a sharp distinction between 'prevention' and a set of HIV-related 'services': counselling and testing, treatment and care, etc. The MTR was struck repeatedly by what it perceived to be a false distinction between 'prevention' and 'service provision'. This is emphasized by the NACs/NDoH dichotomy: NACS does prevention, while NDoH does 'clinical services'. This thinking tends to limit prevention to a set of general population-aimed awareness and condom promotion activities, while counselling and testing, treatment and care, etc. become seen as 'clinical services'. Yet PPTCT, which is definitely a 'service delivery' intervention, remains in the prevention area, and STI treatment, which is primarily prevention, is put in the services area.

This inconsistency is understandable: global and regional, not to mention country, thinking has moved on considerably since the time when the NHS was being designed. It is now clearly recognised that much 'service provision' contributes importantly to prevention: counseling and testing, both for those who test positive as well as for those who test negative, is an important element in influencing behaviour; STI management is a vital prevention measure, particularly for MARPs, as it is such an important co-factor increasing HIV transmission risk; and ART, both indirectly through awareness raising, and directly in reducing viral load, and therefore onward transmission, is "treatment as prevention". Similarly, much 'prevention' is required for effective and efficient service provision: awareness (of services), outreach (by services), community mobilization (for utilization of services).

The MTR considers that NACS and the NDoH should re-think 'prevention', and recognize that prevention and service delivery, whether of counselling and testing, PPTCT, STI services with condom promotion, or ART, are part of a continuum that requires all parts to be closely coordinated, linked and reinforcing. Similarly condom promotion, distribution and use, particularly for MARPs, needs to be linked closely to other services – STI management, counselling and testing, treatment and care.

Much of the work being done by NGOs, and particularly the FBOs, recognizes the importance of this continuum of care: for example, Poro Sapot, the FHI-supported services, Tingam Laip, and much of the services being provided by CHASI, Anglicare and BUPNG are either explicitly or implicitly based on a continuum of outreach, prevention, services and care.

In spite of the NDoH commitment to the continuum of care, however, it has been slow to take off in government health services. There are two reasons for this. First, the perceived dichotomy between prevention (which NACS does) and services (which NDoH does) has vitiated coordination between NACS and NDoH in the development of the full continuum. Second, globally, the full realization of this continuum of care as the basis for effective public health programming, and the limitations of traditional 'public health' approaches (sanitation, food supply and disease outbreaks) has been slow to permeate the health sector. During the course of the MTR we were repeatedly struck by the limited resources available to the public health departments of NDoH and provincial health services. Yet this is an approach that will become increasingly important for the health sector in PNG – as growing awareness of the potential burden of NCDs shows.

This is not a transition that the NDoH can make easily, however. NACS has a critical role in supporting and helping the health sector make these adjustments, in the first instance with respect to HIV, but bearing in mind its potential as a model for longer-term health sector models.

Specific recommendations:

1. **Institutionalize and roll out the National Strategy for Comprehensive Condom Programming (CCP).** The Strategy can be used as a framework to focus, sharpen, strengthen and track condom promotion and use across the whole range of risk situations in the country: high risk, more at risk, and general population. This can achieve three outputs: i) effective harm reduction in multi-partner sex through consistent condom use, lowering HIV transmission risk significantly, ii) continued general population awareness of and access to condoms as a fundamental and cost-effective HIV prevention strategy, and iii) integration of HIV in wider sexual and reproductive health programs. The Strategy is sufficiently robust, as outlined, to ensure all three outputs, if it is institutionalised and implemented vigorously. By 'institutionalise' is meant the full and formal recognition that this is the primary framework for achieving the NHS Strategic Objectives 1.1.2, 1.1.3, 1.1.6, 1.1.7, and 1.1.8; that NACS and NDoH ensure that the operational and governance provisions for the strategy are implemented in full; and that partners recognise and accept this.
2. **Ensure that comprehensive, targeted interventions for high-risk situations and populations are the priority focus within CCP.** The CCP is presently undifferentiated regarding prioritization of target groups. It is important that priority focus is given immediately to high-risk situations and populations, as these are where the most immediate and highest impact results for the national response will be achieved. In this regard, on-going work on MARP identification and typology (by NACS with AusAID support), size estimations (NACS with UN support), and mapping, scale up and implementation by organisations such as Tingam Laip, BUPNG, Anglicare, FHI, etc. are well-coordinated within the CCP framework. At the same time, these interventions need to be closely linked and aligned with service delivery under the Continuum of Prevention and Care (see below). Ensuring this coherence should be a priority for NACS, working closely with NDoH.
3. **Ensure that the prevention is adequately incorporated into the continuum of prevention and care (CoPC).** As noted above, the separation of prevention from service delivery is artificial. As the continuum of care for service delivery matures, it is essential that prevention is fully incorporated. This will be particularly important for MARP interventions, where consistent condom use, user-friendly STI treatment and counselling and testing, and access to care is essential if interventions are to be fully acceptable and accessed – which is the fundamental pre-requisite for effective MARP interventions. The CoPC builds onto the 'continuum of care' – an approach which has been used around the world to successfully provide a comprehensive HIV program that meets the needs of clients. Incorporating prevention into the continuum of care will support strong referral linkage between prevention activities for MARPs which primarily occur at the community level and are carried out by NGOs, CBOs and FBOs to clinical services (HCT, PPTCT, STI screening and management, FP and HIV care and treatment) which are primarily provided by GoPNG and FBOs. Having strong referral linkage is important both to facilitate and enable MARPs' access to services but also to ensure that they are retained in care and get the full complement of services that they require to stay healthy and minimize transmission of HIV to others in the population.
4. **Reduce the priority status of SO 1.1.4, combine SO 1.1.6 and 1.1.7, and drop SO 1.1.9.** SO 1.1.4 concerns partner reduction. This should not be considered a priority under the current epidemiological and socio-cultural dynamics in the country. Partner reduction per se is unlikely to be possible on a scale large enough to have a significant impact on the epidemic in the short term. In addition, given

the rapidly changing socio-economic situation in the country, such an intervention is far beyond the scope of the HIV response; it has far wider socio-cultural implications, and is better addressed through larger socio-economic development programs. As noted above, the distinction between SO 1.1.6 and 1.1.7 (between sex work and transactional sex) is questionable; the aims of both SOs can thus best be achieved by combining them. Finally, SO 1.1.9 (identifying other more-at-risk populations), again as noted earlier, is unlikely to become a priority within the life of the NHS. Although the data are minimal, general wisdom is that the majority of new infections are taking place within 'transactional sex/sex work'.

5. **Male circumcision should remain within the potential scope of prevention programming in PNG; but not among the top ten priority interventions until better data are established from the surveillance system, and the cost-effectiveness of the intervention effectively modelled.** Male circumcision is a potentially important biomedical intervention for the prevention of HIV. Circumcised men have a ~60% reduction in the risk of acquiring HIV during vaginal sexual intercourse with females. A HIV modelling exercise undertaken by the Kirby Institute in 2010 found that the impact of male circumcision on the HIV epidemic in PNG is difficult to ascertain due to the wide range of traditional penile cutting practices (involving slitting or partial removal of the foreskin) which are relatively common in PNG. However they did calculate that circumcising men with no form of penile cutting could potentially have a small impact on the HIV incidence in PNG. Furthermore they estimated that prioritising circumcision uptake to men aged between 15 and 35 years will result in a greater cost-benefit ratio in addition to prioritising men at increased sexual risk of HIV (such as STI clinic attendees or clients of FSWs). Concerns about operationalizing circumcision in PNG have by and large prevented any scale up of circumcision as a prevention activity. A working group to look at this issue has been formed but to date the issue remains dormant.

4.2. Giving gender proper attention

At the macro level gender-based violence needs to be tackled beyond HIV&AIDS and public health frameworks. The participation of all the partners including those outside the NDoH and NACS could efficiently use appropriate resources to address GBV. A National Framework is needed to guide efficient interventions on GBV. Meanwhile, while health service providers acknowledge GBV as a serious issue within health and HIV services, the only provision to address this at the moment is through the Family Support Centres, many of which are not operational. There is presently no explicit pathway or strategy for GBV within the continuum of care, especially to MARPs and KAPs. NDOH needs to ensure effective service delivery to survivors of GBV. The Family and Sexual Violence Action Committee is a critical partner for NDoH for this, along with Poro Sapot, Tingim Laip, FHI 360 and NACS and PACS.

Specific recommendations:

6. **NACS & NDOH should use their experience and current base to facilitate a Government dialogue and endorse a National Strategic Framework to address Family and Sexual Violence.** All implementing partners listed to implement this strategic objective should advocate for a Parliamentary Committee to be established to address GBV and Sexual Violence. NACS has a role to play, given the importance of GBV in the HIV response, in facilitating greater coordination among partners – particularly in ensuring that GBV is included within the CoPC.
7. **NDoH should work with AusAID, UNAIDS, USAID and other development partners to map and review existing sexual violence services and**

strengthen the linkages between medical care and treatment, counseling and support and law and justice. Given that the MTR is recommending that the HIV&AIDS response for the remainder of its term focus on KAPs and MARPs the gender based violence intervention must be explicitly included within the continuum of prevention and care for these groups.

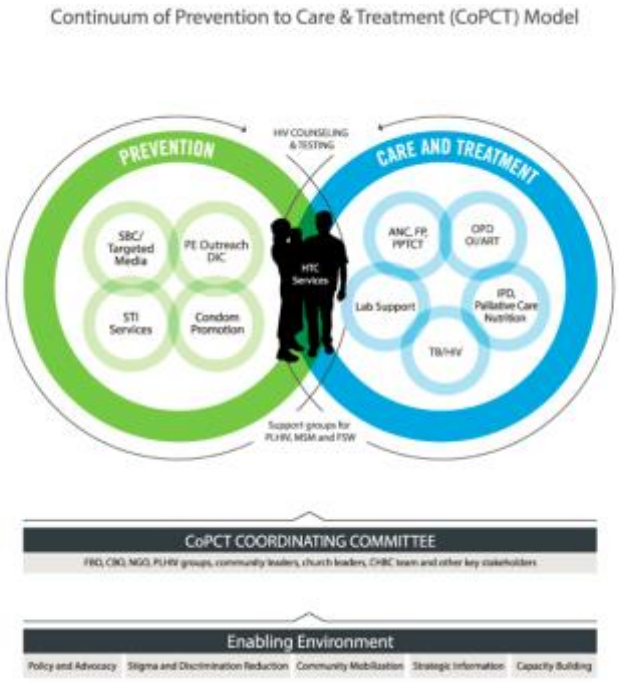
8. **NACS and NDoH work with FSVAC to establish 5 more family support centres in high and medium prevalence areas.**

4.3. The Continuum of Prevention and Care

The need to incorporate prevention into the continuum has been discussed above. Furthermore the need to improve retention in care and facilitate MARP access and retention in clinical prevention and care/treatment services were two major themes identified by the MTR. Around the world, the conceptualization of service delivery across the CoPC has assisted health managers and service providers to plan accessible, client centred HIV services that meet the needs of MARPs and PLHIV across their lifetime[7].

The CoPC is a network of services (prevention, HCT, care, treatment and support) that are strongly linked and coordinated to provide services catering to the needs of PLHIV, MARPs and their families across the continuum of their life. The CoPC supports the goals and objectives of the NHS by facilitating linkages, coordination and consolidation of prevention, care, treatment and support services for people infected and affected by HIV.

Figure 10: Continuum of Prevention to Care & Treatment (CoPCT) Model*



*Notation: FHI 360 PNG

The CoPC coordination committee provides the mechanism for linking all these services, developing strong referral mechanisms and identifying gaps/needs in

[7] See, for example, very recently: *Redefining global health-care delivery*, Jim Yong Kim, Paul Farmer, Michael E Porter, The Lancet, published online May 20, 2013 http://dx.doi.org/10.1016/S0140-6736(13)61047-8

services for PLHIV and MARPs. As noted above this facilitates and enables PLHIV and MARPs access to services but also helps ensure that they are retained in care and get the full complement of services that they require to stay healthy and minimize transmission of HIV to others in the population.

This approach has many strengths, one of the most important being that it provides a template that can be adapted to suit local circumstances that program managers can use to plan, manage and assess delivery of the full complement of HIV prevention, care and treatment services. The CoPC has been trialled in PNG in a number of locations, primarily supported by FHI 360. A process evaluation of the CoPC has been carried out in PNG – although at the time of the MTR this report had not been approved for circulation. Draft findings of the CoPC evaluation indicate that it is a model that is appropriate to PNG which has the potential to contribute to i) establishing linkages between disparate service providers toward a true continuum of prevention, to treatment and care services; ii) strengthening the quality of services provided; and ii) improving retention in treatment services, adherence to treatment regimens and treatment outcomes.

The planning and scale up of HIV services under the CoPC in PNG – a country which must deal with a diverse HIV epidemic across its 22 provinces the would be aided by the development of core service packages appropriate to high, medium and low prevalence provincial HIV epidemics that can be adapted/tailored to the key drivers of the local epidemics, geography, infrastructure and access to resources – these could be costed, and include key program outcome indicators that are attached to staffing and budget norms and with staffing norms). This process will require analysis of provincial and district led data and program analysis to aid efficient planning of what HIV services need to be provided; where and by whom. An illustrative example of core service packages for low and high prevalence settings was developed by the MTR team and is provided below. It is acknowledged that the development of core packages for PNG would need careful consideration and would be need to be tasked to the NDoH in consultation with managers and health workers from both high and low prevalence settings below.

Table 1: Illustrative Example of Core Service Packages for High and Low Prevalence Settings

High Prevalence Core Package	Low Prevalence Core Package
Service provided – Stand alone HIV/STI clinic fully integrated into provincial hospital linked with prevention services and supervising HIV/STI/HCT services at TBD number districts providing similar package of services integrated into ID/TB or OPD	Service provided– HIV clinic integrated into provincial hospital TB/ID/STI or OPD department (+/- DHC depending on need and resources);
Core Package – Strong linkage with prevention NGO/CBO, VCCT, PITC in all relevant departments, Pre-ART care; OI/TB care; Adult ART; Pediatric EID and ART, adherence support; PPTCT, STI, PEP, Family Planning	Core Package – PITC in all appropriate hospital services (TB/STI), Pre-ART care; OI/TB care; Adult ART; Pediatric EID and ART (provincial hospital only), adherence support; PPTCT, STI, PEP, Family Planning,
Outcome: At least 90% of identified PLHIV in the district/province registered and on ART if eligible	Outcome: At least 80% of identified PLHIV in the province/district registered and on ART if eligible
HR Requirements – 1 HEO/Dr supervising HIV care, 2 nurses and 3 CHWs per 200 clients on ART	HR Requirements – 1 HEO/Dr supervising HIV care, 1 nurse and 1 CHW per 100 clients on ART
Unit cost per PLHIV on ART -150 kina/yr (not including ART)	Unit Cost per PLHIV on ART – 100Kina/yr (not including ART)

Specific recommendations:

9. **The Continuum of Prevention to Care model of service delivery is institutionalized in PNG to strengthen links between PLHIV and KAP/MARPs in the community and clinical services.** This will improve access of KAP/MARPs to HCT and care/treatment services, reduce loss to follow up and improve efficiency (for example by ensuring systems are in place for PITC for all TB and STI clients and strengthening TB-HIV co-infection management).

PPTCT

10. **The scale up of PPTCT in PNG needs to be carefully planned.** HIV testing in ANC is an important part of HIV surveillance and it is feasible that PICT could be scaled up widely and in as many ANC settings as possible without creating a big burden on the health system. It is appropriate for high prevalence provinces to decentralize the PPTCT program and integrate the full range of PPTCT interventions into health facilities where ART is provided. However it is likely not be cost effective to decentralize all components of PPTCT programs to the district level in low and medium prevalence provinces. In low prevalence settings ART/delivery/EID and follow could be provided at provincial centres (or cluster district health centres).

11. **Mechanisms to reduce LTFU should be examined across all programs providing ART including PPTCT services.** There is scope to further improve and enhance linkage and coordination of PPTCT and paediatric HIV services with MCH services by institutionalizing service delivery across the Continuum of Prevention to Care (CoPC)- see above. Identification of the reasons for loss to follow up would aid the design of strategies to improve retention in care. Increased linkage between prevention services and clinical services through a strengthened CoPC would also help to increase access of higher risk female KAP/MARPs to PPTCT services.

12. **Integration of family planning services into the HIV and PPTCT program in ANC clinics is urgent, as this is an essential part of HIV prevention.** In Catholic health services – a strong, well supported referral mechanism through a strengthened CoPC will be critical in ensuring women who access Catholic health services have access to family planning.

Counselling and testing

13. **Over the remaining two years of this NHS, a focus on targeting the provision of counselling and testing to those most likely to have HIV infection should be prioritised.** PICT as relates to the PPTCT program should continue to be scaled up as per section XX. There are a number of ways to improve targeting of HCT services including:

- Focussing on increase testing in STI and TB clinics. This is an urgent priority activity for the remaining years of the NHS.
- Providing mobile HCT using POC testing to KAP/MARPs where they live, work and play (markets, PMV stops, buai stalls and other sites where sex is exchanged)
- Scaling up PICT in preference to scaling up traditional 'VCT' services – this should make counselling and testing more efficient and able to be provided in busy high volume sites without restriction.
- Improving referral links between NGOs/CBOs and other groups providing prevention outreach and working with KAP/MARPs in the community to HCT and care/treatment services through institutionalizing the COPC
- Including messages about the important of knowing one's status and accessing early treatment in prevention programming

Adult and Pediatric ART

14. **The extent of LTFU in the HIV care and treatment program needs to urgently be ascertained as it has serious implications for the durability and success of PNGs first line ART regimes.** The use of case managers and NGOs, CBOs, PLHIV peers and volunteers who can assist in supporting PLHIV on ART to stay in care and also track LTFU clients needs consideration. SMS messaging is a relatively low cost intervention that has been used to track clients and remind them of clinic appointments/ARV adherence many countries in the world and could be considered in PNG.

15. **Data management issues need to be urgently addressed as they have widespread implications (forecasting, budgeting, assessing coverage and need for scale up, monitoring LTFU etc.)** The MTR feels strongly that the further scale up of HIV clinical services including ART needs to be driven by improved data collection, management and planning – to carefully target locations where services are needed. The development of packages of core HIV prevention and care and treatment services that can be tailored to local epidemics, geography, infrastructure and access to services would support planners and health managers to undertake this process in a consistent and efficient way.

STI Management

Currently the management of STIs is not covered under the NHS Top 10 Interventions. Given the high burden of STIs in PNG and the increased risk of HIV transmission related to untreated STIs the management of STIs in PLHIV/KAP is an important HIV prevention intervention in PNG. In the current NHS, Priority Area 2 includes the strategic objective 2.3.1 *"Free quality STI screening and management is accessible in all health facilities including ANC services".*

16. **The management of STIs should be considered a priority activity over the remaining years of the current NHS and included in the Top Ten Interventions.**

17. **GoPNG/NDoH should urgently consider implementation of the recommendations from the recent PASHIP evaluation.** This evaluation recommended that PNG complements its current focus on STI clinical management using the syndromic management approach with a more public health approach focused on detecting and managing asymptomatic STIs among particular population groups and in particular geographic locations. This would include:

    - Improved detection and management of serious, curable, asymptomatic STIs that can be detected and treated cheaply (in particular, syphilis).
    - An increased focus on screening and case finding of asymptomatic STIs in certain high priority geographic areas (e.g. high STI/HIV burden provinces, economic enclaves; and major population centres such as Port Moresby, Lae, Madang, Goroka, and Mount Hagen).
    - An increased focus on screening and case finding of asymptomatic STIs in priority populations including female, male and transgender sex workers, MSM, clients of sex workers, mobile men with money etc.
    - Periodic presumptive treatment of KAP at high risk for repeated STI may also be considered

The PASHIP evaluation also includes thoughtful discussion regarding the pros and cons of stand- alone versus integrated STI services, which should be considered when designing the interventions above.

4.4. Monitoring and Reporting on the NHS

The broad objectives for improving strategic information systems in PNG remain highly relevant. However, in light of resource and capacity constraints, it will be important to prioritise those activities that are most essential but also feasible, and to revise targets accordingly.

Specific recommendations

18. **The national SITWG should take an active role in ensuring that progress continues to be made in strengthening the strategic information system.** It should guide the consolidation of the surveillance and M&E efforts of NDoH and NACS to ensure what capacity there is is made best use of, and to prevent duplication of activities and data collection demands placed on service providers.

19. **NDoH must renew efforts to rebuild capacity, to allow for the performance of its key surveillance role, to effectively coordinate the HIV surveillance system and to better analyse and interpret surveillance data.** The recruitment of a surveillance coordinator/epidemiologist is essential, and any additional support required to achieve the priority surveillance goals should be identified.

20. **For the next two years NDoH should focus on three priorities.** It is not realistic to resume the National Surveillance Plan in its current form. During this

time the routine surveillance activities of NDoH should focus on: a) the collection of HIV testing data, prioritising data including denominators from ANC sites; b) collection and analysis of HIV case notifications; and c) maintaining the ART monthly reporting database which aims to capture the number of people newly registered pre-ART, those starting treatment, and those who have died or been lost to follow up.

21. **Work on data collection forms should continue.** At the time of the MTR the forms used for collecting monthly HIV testing data and ART reporting were in the process of being amended, primarily to better capture data relating to PPTCT. This also represents an important opportunity to more comprehensively revise these forms, in consultation with service providers, so that they might better capture data required for routine surveillance purposes.

22. **Database security must also be addressed.** The National HIV datasets should be located on a secure server, and protocols for backing up these datasets developed and adhered to.

23. **Strengthening ProMESTs should be a priority, as it has the potential to yield substantial benefits for the entire surveillance system.** Providing training and support to increase ProMESTs' capacity to collect, verify and analyse data at the provincial level would improve data quality and completeness at the national level as well as increasing the utility of data at the provincial and facility level. For this to be successful it will be necessary for both NACS and NDoH to actively and jointly participate in this process and provide ongoing support to provincial level staff and stakeholders.

24. **A feasible set of behavioural and bio-behavioural surveillance activities need to be programmed with priority being given to identifying sentinel surveillance through ongoing, repeatable BSS in high prevalence settings and with key populations exposed to high levels of risk; where appropriate results from existing BSS should be used as baseline data.** It will be necessary to secure funding for BSS activities and to build capacity to conduct this research. Opportunities to gather behavioural data through service provision should also be pursued. When providing outreach services to at-risk populations, behavioural questions can be asked for limited, regular repeated time periods. Clinical services that successfully reach particular key populations are also potential providers of routine data on HIV prevalence and risk behaviours. With the planned IBBS currently suspended, the need and value of investing further in a national general population IBBS should be reassessed. Such an evaluation should consider the significant financial costs (and opportunity costs, particularly in regard to staff time) involved, the requirements for training a large workforce to complete the study, and the probable impact of the survey and its findings.

4.5. The Architecture – strengthening cost-effective systems

NACS was established to coordinate a multi-sectoral response to an HIV epidemic in PNG that was considered to be too big, too threatening, too wide-spread, too complicated for the health sector to deal with alone – and that a multi-sectoral coordinating 'architecture' was needed. This thinking was recommended by UNAIDS (the UN program set up to coordinate the response to the HIV epidemic at the time) and endorsed by donors. Twenty years later, globally and regionally, three things have changed:

- It is now globally recognised that concentrated epidemics, such as that in PNG, do not require multi-sectoral response architecture, beyond the health sector. A number of countries round the world have shown that the health sector can

develop and maintain effective HIV programs for concentrated epidemics – such as China, Cambodia, Vietnam, Australia, UK, USA, Ukraine, Fiji, Myanmar, Moldova, Brazil, etc.

- It is now globally and regionally recognised that the health sector, and health care systems, can be, and are being, strengthened to provide multi-sectoral responses to health problems that have multi-sectoral elements: such as avian flu, diabetes, diarrhoeal diseases, COPD, hyper-tension, SRH, etc.
- It is now globally and regionally recognised that the architecture for multi-sectoral coordination is very cost-heavy (expensive), and is only justified in extreme cases. We are learning that health systems are dynamic, civil society is extremely adaptable and flexible, and that emerging decentralisation patterns in many countries provide ways to strengthen local level coordination more effectively than national bodies.

We now know that PNG does not face an HIV epidemic on the scale of Sub-Saharan Africa (see section 2 above); PNG's epidemic is concentrated; and is likely to remain so. With better understanding of the epidemic, and stronger health sector tools now available, the epidemic can be contained by the health sector; though significant development in its programming will be required. Provincial responses are already emerging as effective frameworks for coordinating the response.

The architecture for the 'multi-sectoral response' is thus, essentially, obsolete. In addition, the dynamics of the epidemic in PNG do not justify further long-term investment in such architecture. But PNG has invested heavily, financially, politically, programmatically and intellectually in this architecture, and there are likely to be significant costs in dismantling it. The health sector does not yet have the capacity and capability to manage the full continuum of prevention and care with a full multi-sectoral perspective. Provincial structures and processes are emerging that can take the new model forward, but require nurturing and support.

Three aspects of this model seem critical:

- Expanding public sector 'service delivery' concepts and models to include outreach, community mobilisation and participation,, follow-up, service promotion, etc.; much as a number of Faith based service providers are already doing;
- Looking for greater coordination among various civil society (CBO and NGO) groups with public sector health services; as PACS have been trying to do for 'prevention';
- Strengthening reporting and monitoring systems to ensure services get targeted in the most appropriate areas.

This presents an opportunity for NACS – to focus upon what is needed for the health sector to develop appropriate expanded public responses to HIV – and by extension, other up-coming disease challenges such as diabetes and hypertension. And to develop the tools, studies, analysis and short-term support measures necessary to build that capacity within the health sector. It is critical, therefore, that NACS should work closely with NDoH to strengthen and support the health sector's integrated response. As part of that plan, immediate identification and strengthening of specific NACS' functions that support this should be undertaken (eg M&E, focus on MARPS, developing integrated models, how to extend continuum of prevention & care beyond health service delivery).

Specific recommendations:

25. **NACS should engage its Council in a dialogue to interrogate the findings of this MTR, to identify the required new roles and responsibilities for NACS,**

and to determine a road map and accountability framework for NACS to implement the road over the coming two years.

26. **To better inform this dialogue, NACS should engage NDoH and other service delivery partners in immediate and urgent discussion about how best to move the health sector towards this new model.**

27. **Internally, the NHS planning process at the national level will now be irrelevant for the NGOs and should focus on strengthening the PACS to support the stakeholders at the sub-national level.** It is crucial for the PAC and its secretariat (PACS) to liaise with the governors' office, the provincial administrators' office, the DAC, the district administrator's office, the district health officer and the office of the local Member of Parliament to access the PSIP, DSIP and LLGSIP funds. More focus and attention needs to be given to the Provincial Engagement Framework implementation in order to secure sub-national level funding to support HIV programs. NACS must support PACS to facilitate local level planning and budget by using the local level systems example PMT, PCMC, JDP & BPC processes to access the local level funding arrangement.

28. **NACS should re-assess and re-design how it coordinates at sub-national level.** Unless very clear terms of references, scope of work and processes for checks and balance for both financial and program reporting and accountability for the UOs are developed by NACS and used by the OUs, the non-functioning OUs should be abolished. Focus should be on establishing similar and more robust systems at the local level. PACS and NACS need to allocate at least one or two people respectively to be responsible for managing the OUs so that they feel attached to the NACS/PACS management and a 'home' where they can get technical and program support to function effectively and efficiently. NACS should continue to work with Igat Hope and BAHA only, and strengthen their capacity especially that of Igat Hope. NACS must work to assist Igat Hope to build the capacities of its sub-national partners especial for those in high prevalence Provinces.

29. **NACS should facilitate strong NGO & Government (NDoH, NACS, PACS, PG) collaboration to encourage better and targeted use of TA, training and other resources to build capacity for NACS, PACS, PG and the NGO partners.** NACS and PACS should work through the Regional Managers and Provincial HIV&AIDS Response Coordinator to assist TA mapping exercise with the Provincial Administrations initially in high prevalence provinces. This exercise will assist the Provincial Management Team to secure funding within their systems for provision of TA as and when needs for specific tasks including capacity development for sub-national implementer of the NHS. NACS, NDoH, development partners and current partner NGOs, FBOs, and CSO work together to establish and scale up a TA mobilisation and partnership system to improve linkages between organisations that need TA and organisations that provide TA, and evaluate and share the learning from existing TA programs at the sub-national level.

Annex 1 NHS Implementation Framework - Matrix of Progress & Status

In this Annex the status, likelihood of achieving targets, and progress in the major activity areas of the NHS have been assessed. Only strategic areas covered by the Top Ten Interventions have been covered.

Priority Area 1: Prevention

Strategic Priority 1: Reduce the Risks of HIV Transmission

Cluster 1.1: Sexual Transmission of HIV and Other STIs

Priority Area: (1) Prevention						
Goal: To reduce the transmission of HIV and STIs in PNG using a combination of prevention approaches						
Strategic Priority: (1) Reduce the risks of HIV transmission						
Cluster: (1.1) Sexual transmission of HIV and other STIs						
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.2 Increased correct and consistent use of male and female condoms, with an emphasis on people who have multiple serial and concurrent sexual relationships	Percentage of men and women aged 15-59 who had more than one sexual partner in the past 12 months who report the use of a condom during last intercourse (UNGASS) (National Indicator#4)	38.9%[i] (15-49 years only)	80% **<u>Recommended new target: 70%</u>**	**Highly variable** - Port Moresby ANC (2008) – 33% WR Carpenter Workforce (2010) – 33% Oil Search rural enclaves 2009) – 68%	Increase condom access and use through social marketing that focus [sic] on promoting correct and consistent male and female condom use amongst[sic] men and women of all age groups within long-term relationships and within marriage (for example promoting the use of condom for family planning as well as HIV and STI promotion)	While PSI is managing a social marketing of condoms program, this is not specifically focused on 'long-term relationships and within marriage'; indeed, it is rather focused on more-at-risk situations. While this activity is laudable in itself, it is unclear how far it is relevant to the strategic objective.
					Promote targeted correct and consistent condom use linked to increased access to condoms in locations where there multiple concurrent sexual networks and this type of behaviour is more prevalent	Until recently, condom promotion has tended to be generalised, though with some specific targeting within project frameworks): eg condom promotion within Oil Search project areas. A new thrust to target condom promotion in specific more-

				Askim Na Save (2010) – 37% Truck drivers (2010) – 62% **Limited data – so unable to assess whether on track or not; but the new target should be achievable**		at-risk situations has been developing in the last year, however, which needs to be prioritised, strategized and implemented coherently.
					Strengthen procurement, supply and distribution systems for male and female condoms and lubricant with a wider variety of condoms made available and a greater range of condom access points and retail outlets, with emphasis on the different access needs of men, women, young men and young women	While condom procurement and supply appears to be satisfactory, distribution remains a challenge. 95% of condom imported (some 30 million in 2012) are distributed free, severely limiting the effect of the social marketing program, and from some perspectives, limiting the perceived value of condoms to potential users. The **National Strategy for Comprehensive Condom Programming (CCP)** is being finalised; and is already being used as framework for addressing this issue.
					Identify and address the barriers (including gender- and age-related barriers) to effective condom promotion, including working with churches, to advocate the importance of condoms as a tool for the prevention of HIV, STIs and for family planning	This features as an item within the National Research Agenda, assigned to PSI, who are starting work in this area. Again this figures prominently in the **National Strategy for Comprehensive Condom Programming.** The up-coming **NACS Communications Workshop Agenda** (specific objective 3), and the strategies emerging there form are an excellent opportunity to inform the CCP with respect to targeted condom promotion.
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.3 Increased correct and consistent use of condoms and lubricant for	Percentage of men and women aged 15-59 who reported condom use during	No data available at this time	80%	**Highly variable:**	Include in prevention interventions accurate information on the risks of HIV transmission associated with unprotected anal sex	Little evidence that this is being done sufficiently; pamphlets on condoms, for example, do not include this; it was not referred to as a vital message by interviewees.

heterosexual and homosexual anal sex	last occasion of anal sex (PNG) (National Indicator#8)		**<u>Recommended new target: 50%</u>**	WR Carpenter – 5% LAE STI clinic – 12% ANC POM – 17% OSL – 41% ANS – 33% Truck drivers – 48% **Limited data – so unable to assess whether on track or not; but the new target should be achievable**	Promote access to condoms and lubricants for men and women of all ages who practice anal sex	Since anal sex appears to be relatively common among men and women who also practice vaginal sex, promotion of access to condoms is covered by default; it appears no to be emphasised, however.
					Improve understanding of anal sex as a key factor in HIV transmission by providing focused information in family planning, STI, and HCT services, and by including information on anal sex in pre-service and in-service training for health workers	Anal sex and associated risks included in key NDoH training materials, esp: 1. STI Syndromic Training Manual 2. HIV Prescriber Training Manual - Part 1 which focses on Infection and Pathophysiology of HIV 3. Basic HIV Training Manual for VCT/PICT purposes
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.4 Males and females reduce the number of their concurrent sexual partners	Percentage of women and men aged 15-59 with more than one ongoing sexual partnership at the point in time three and 12 months (National Indicator#1)	Antenatal mothers 15-49 15%[ii] STI clinic clients[iii] (15-49) Males 55.28% Females 24.7%	5% **<u>No recommended target</u>**	**Highly variable**: OSL – 40% Jiwarka plantation workers – 30% Truck drivers – 43%	Use a range of approaches to highlight and address the risks of having concurrent sexual partners, especially in high prevalence locations. For example, interpersonal and family-centred approaches, utilising peer networks, social networks, churches, and work places	While this message appears in much of the prevention work being done, field workers, even in FBOs, tended not to stress it, saying that having multiple sex partners has become too common a behaviour to be worth struggling against. In addition, polygamy being relatively common in PNG, much of the local literature describes the inconsistency of this message for men and women in polygamous relationships.

	Percentage of women and men aged 15–59 who have had sexual intercourse with more than one partner in the last 12 months (National Indicator#2) Percentage of women and men aged 15-59 who have had sexual intercourse with more than one partner in the last 12 months (UNGASS) (National Indicator#3)	Total 37.5%		ANC-POM – 15% **Limited data – so unable to assess whether on track or not**		There appears, however, to be little appreciation within the national response of the nature of the risks in concurrent sexual partnerships. The role of STIs in HIV transmission, and the risks of acquiring STIs from concurrent partners; the low transmissibility of HIV in vaginal sex in the absence of STIs; and the relationship between the number of concurrent partners and HIV risk, appear to be all little appreciated.
					Conduct social research on concurrent sexual relationships to guide programming	Concurrency (in all its forms) is high on everybody's list of research, and is included in all behavioural studies
					Address cultural values, beliefs, and practices that encourage multiple and concurrent partnering, including polygamy, and develop communication strategies to encourage and enable partner reduction	See above.
					Develop HIV communication messages to addresses the risk of sexual transmission of HIV within marriages, long-term partnerships, and to unborn children	Most of the communication messaging of recent years could be said to be of this form – undifferentiated messaging about HIV transmission.
					Develop targeted awareness messages on how unprotected sex with multiple and concurrent sexual partners increases HIV transmission, with a focus on particular times and settings that create and expand opportunities for sexual networking (for example, during election campaigns)	See above
					Develop targeted awareness messages on how unprotected sex with multiple and concurrent sexual partners increases HIV transmission, with a focus on specific circumstances that	See above

					increase risk (for example, job related mobility)	

Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.6 People engaged in sex work and their clients adopt and sustain behaviours that reduce the risk of HIV transmission	Percentage of female and male sex workers reporting the use of a condom with their most recent client (UNGASS, UA) (National Indicator#5) Percentage of more-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (UNGASS) (National Indicator#39)	No data available at this time	80% **<u>Recommended new target: 75%</u>**	**Variable data:** ANS - 37% Mt Hagen SW - 63% FHI-POM – women 63-71%, MSM – 70-72% **Limited data – so unable to assess whether on track or not; but with new target should be achievable** **UNGASS composite indicator:** ANS – 61-78% Mt Hagen FSW – 53-92% FHI-POM – MSM 84%, FSW – 36%	Promote correct and consistent condom use amongst sex workers, their clients and their regular partners, including increased promotion, access to and usage of female condoms	This is becoming increasingly the focus of much prevention programming.
					Promote safer sexual practices (including non-penetrative sex) to enhance sexual pleasure amongst sex workers and their clients	Little evidence of this approach was found.
					Integrate drug and alcohol harm reduction interventions into existing and new projects targeting male and female sex workers and their clients	Some suggestion that this is being developed. Tingam Laip, for example, is piloting interventions in three to five sites aimed at reducing the impact that excessive alcohol use has on the decisions that people make about putting themselves at risk of acquiring or transmitting HIV. A recent study (Kelly et al., 2012, IMR/UNSW) reviewed the connections.
					ADD: **Ensure access to user-friendly STI services for sex workers**	Treating STIs in sex workers is a critical prevention activity mission from this strategic objective.
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.7 People who exchange sex for money, goods and	Percentage of men and women who participated in	No data available at this time	60%	The indicators to distinguish 'transactional	Promote correct and consistent condom use during transactional sex, including promotion of female condom use	See comments under previous strategic objective. 'Transactional sex' is currently insufficiently differentiated from 'sex work'

services and their clients adopt and sustain behaviours that reduce the risk of HIV transmission	transactional sex in the last 12 months reporting condom use at last transactional sex (PNG) (National Indicator#6)			sex' from sex with a 'client' (indicator above) are not developed sufficiently to measure this indicator	SPromote safer sexual practices (including non-penetrative sex) to enhance sexual pleasure amongst men and women of all ages who engage in transactional sex Integrate drug and alcohol harm reduction interventions into existing and new projects targeting people who engage in transactional sex	in definition, measurement, research and M&E to be able to make any meaningful distinction between these two in programming.
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.8 Men who have sex with men adopt and sustain behaviours that reduce the risk of HIV transmission	Percentage of men reporting condom use the last time they had anal sex with a male partner (UNGASS, UA) (National Indicator#7) Percentage of more-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (UNGASS) (National Indicator#39)	No data available at this time	80% **<u>Recommended new target: not possible at this stage</u>**	There is limited data on men reporting sex with other men: Truck drivers – 0.4% OSL – 5% WR Carpenter – 0.4% Where MSM are identified as a separate group, there is Insufficient data available to distinguish between MSM and MSM sex workers **Limited data – so unable to assess whether on track or not**	Promote correct and consistent condom and lubricant use amongst men who have sex with men and their male and female partners Promote safer sexual practices (including non-penetrative sex) to enhance sexual pleasure amongst men who have sex with men and their male and female partners Integrate drug and alcohol harm reduction interventions into existing and new projects targeting men who have sex with men and their male and female partners	To the extent that MSM are identified as sex workers, this is being covered; very limited specific non-sex worker MSM programming was noted, however.

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
1.1.9 Other more-at-risk groups are identified and interventions established to address specific risk behaviours (Refer 2.4.1)	Percentage of more-at-risk populations reached with HIV prevention programs (UNGASS) (National Indicator#30)	No data available at this time	No target set at this time	**Limited data – so unable to assess whether on track or not**	Conduct regularly reviews of evidence for HIV –related high risk behaviours to determine who are the more at risk groups in PNG	A wide variety of 'more-at-risk' populations are commonly identified by various people: sex workers, clients, MSM, women in transactional sex, truckers, MMM, women, youth, girls, etc, etc. Unfortunately the appropriate level of risk for these 'populations' is largely unidentified – so that apart from the sex worker and transactional sex categories the definition of these groups as 'more-at-risk' is largely meaningless.
					Conduct periodic size estimations of more-at-risk groups are undertaken	Apparently size estimations for some 'more-at-risk' groups are about to undertaken with UN support.
					Pilot, establish and strengthen interventions that address identified more-at-risk groups and their risk behaviours	See above

Cluster 1.2: Prevention of Parent to Child Transmission of HIV (PPTCT)

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
1.2.1 Management and coordination capacity of PPTCT services strengthened and linked with maternal and child health and gender based violence services at national and sub-national levels	Number of facilities providing ANC services that also provide HIV testing and counselling for pregnant women (UA)	45	664 **Revised Target** 60-70% ANC services in high and medium prevalence	316 (48%) NDoH 2012 **Likely to be achieved with new target**	Improve management and coordination to strengthen quality implementation of PPTCT programs integrated with MCH and GBV services	ANC services are provided in 724 health facilities around PNG. Of these 316 sites provided PPTCT services in 2012. The scale up of PICT and point of care (POC) testing has improved access to ANC testing and assisted the scale up of PPTCT services. Strong linkage and coordination within the HIV and MCH health sector are key for the success of PPTCT programs (and paediatric HIV services) which are implemented across multiple services and levels of the health system. The MTR saw evidence of good linkage and integration of PPTCT into MCH services in PNG with minimal

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
			provinces			loss to follow up between diagnosis in ANC and provision of ART in HIV. There is scope to further improve and enhance linkage and coordination of PPTCT and paediatric HIV services with MCH, HIV and other critical services by conceptualizing service delivery and implementing services across the Continuum of Prevention to Care (CoPC) The target that almost all ANC services provide HIV counselling and testing for pregnant women is extremely ambitious and is neither feasible nor achievable in the remaining time frame for implementation of the NHS. The target needs to be revised down (consider 60-70% of ANC services and focussed in high and medium prevalence provinces)
					Increase visibility and advocacy to ensure attention and integration of PPTCT and Paediatric AIDS programs within MCH services	As above
					Develop evidence informed guidelines and policy documents to ensure quality implementation of PPTCT programs	PMTCT guidelines are up to date and have already been integrated into the HIV care and treatment guidelines

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
1.2.2 Quality and access of PPTCT services is improved through strong linkages to MCH and communities, increased involvement of positive women and their partners and ensuring programs provide safeguards against negative consequences of testing	Percentage of HIV positive pregnant women who receive antiretroviral medicines to reduce the risk of mother to child transmission (UNGASS) (National Indicator#9)	12%	80% **Revised Target** 70%	19% (UA) **Could be achieved with new target**	Scale up services to ensure that health care facilities at regional, provincial and district level are delivering quality PPTCT services with strong continuum of care in an enabling environment for all pregnant women, their partners and families (for example, by improving links between PPTCT services and GBV, ART, family planning, HIV prevention and enhanced counselling services with clear definition of package of services for each level)	The focus on scaling up PPTCT services in high prevalence provinces and settings is efficient and relevant to PNG's HIV epidemic. The PITC component of the PPTCT program has been scaled up more widely than access to ART for pregnant women which is also highly appropriate to the HIV epidemic in PNG. PNG has recently revised its PPTCT guidelines to be consistent with WHO recommendations and is recommending life- long ART for pregnant women. The scale up of PPTCT in PNG needs to be carefully planned. HIV testing in ANC is an important part of HIV surveillance and it is feasible that testing be offered widely in as many ANC settings as possible regardless of HIV prevalence. However it may not be cost effective to decentralize all components of PPTCT programs to the district level in low prevalence provinces. In such settings ART/delivery/EID and follow could be provided at provincial centres (or cluster district health centres) High rates of LTFU of pregnant women post partum were reported to the MTR indicating that the continuum of care needs further strengthening to support PPTCT services. The MTR recommends that mechanisms to reduce LTFU are examined across all programs providing ART (see 2.1.10). There is little evidence that female PLHIV are able to easily access family planning. Health workers reported many repeat PPTCT cases. The MTR also strongly recommends integration of family planning services into the HIV clinic as this is an essential part of HIV prevention and

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
						PPTCT programs. In Catholic health services – a strong, well supported referral mechanism will be necessary to ensure women have free access to family planning.
					Enhanced outreach and community services to increase access to ANC including PPTCT services and increase ANC attendance, supervised deliveries and decrease loss to follow up with a focus on HIV positive pregnant women (for example, by scaling up "safe testing" programs that reduce violence and abandonment against mothers who are diagnosed with HIV & increased involvement and strong linkages with NGOs and CBOs)	See above The MTR found that some service providers undertook outreach ANC that included PITC – much of this done by Catholic supported health services. A small number of NGOs (e.g Marie Stopes in WHP) provide a 'safe testing' program. The MTR recommends that the focus of this activity should be to increase access of higher risk female KAP to PPTCT services - increasing linkage between NGOs offering community based services for KAP and health based PPTCT services though an enhanced CoPC would support this.
					Utilise HIV positive mothers and their partners as experts in the design, delivery and review of PPTCT services	There are several examples of utilizing HIV infected mothers and their partners in PPTCT programs including the 'Mother Mentors' program rang by the Catholic HIV health services in Enga. This is a useful activity but should not be a priority activity for scale up over the next 2 years.

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
					Implement strategies to improve male partner involvement in ANC and subsequently PPTCT services (example male friendly ANC clinics/men's clinics, waiting space for men who accompany women for ANC etc)	Health care providers reported an increase in male involvement in PPTCT via 'couples counselling' which is actively promoted in the Catholic HIV health services. In addition some government providers also noted an increase in men accessing HCT via/though PPTCT. Several 'men's' clinics provided by the Catholic health services provide information and education regarding PPCTC. The MTR recommends that the focus of this activity should be to increase access of higher risk male KAP and their female partners to PPTCT services.
					Enhance communication activities such as mass media campaigns, social mobilisation campaigns and inter personal communication (including targeted efforts to reach men and male leaders) to increase awareness on services, improve utilization and strengthen acceptance of PPTCT interventions during pregnancy and breastfeeding	It is perceived that awareness about PPTCT programs is quite low at the community level. The importance of general awareness campaigns to increase PPTCT is questionable. The MTR recommends that a focussed strategy to assist the referral of female KAPs to PPTCT services is implemented.
					Ensure pregnant women and their partners have access to prevention information and male and female condoms during pregnancy and breastfeeding through strengthening linkages with primary prevention, with a focus on the women who test negative	Condoms are currently widely available in PNG. The effectiveness of this approach is questionable and it should not be a high priority activity of the HIV program over the next 2 years of the NHS. An increased focus on integrating family planning services into HIV services would be more useful.
					Strengthen delivery of quality laboratory services to support implementation of PPTCT programs including addressing	This activity is no longer relevant now that point of care testing is being scaled up in PPTCT programs

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
					faster turnaround period for test results	
1.2.3 Strengthen capacity of health workers and stakeholders to deliver quality PPTCT services integrated with MCH services	Percentage of pregnant women who were tested for HIV and received their results – during pregnancy, during labour, and during post-partum period (<72 hours), including those with previously known HIV status (UA) (National Indicator#10)	21%	80% **Revised Target** 70%	31% (UA) **Could be achieved with new target**	Develop a sustainable strategy and plan for capacity development for PPTCT with activities at national and sub national levels clearly defined	The PPTCT curriculum has been finalized – and training rolled out. Some providers have noted that delays in finalizing the curriculum and rolling out training delayed the initiation of their PPTCT programs. This activity is on track
					Review and update training curriculum for PPTCT programs for different cadres of health care workers and key persons working in the PPTCT program (including training on GBV, safe disclosure techniques and couple testing)	The PPTCT curriculum was finalized in 2011 This activity is on track
					Develop and implement a supportive mentoring system for continuous skill building in health care workers on PPTCT	Mentoring and supportive supervision for PPTCT is being provided by the regional HIV managers, CHASI and NGOs including CHAI who have been very successful in supporting the scale up of PPTCT in WHP and EHP. Efforts to increase supervision and mentoring of the PPTCT program in Enga and Simbu and other high prevalence settings are recommended.
1.2.4 Ensure consistent supply of HIV-related commodities to all ANC sites	Percentage of health care facilities delivering PPTCT services that report stock out of test kits in the last 12 months	No data available at this time	0		Review and streamline distribution systems for supply of diagnostic kits including syphilis test kits, HIV test kits and Hb, CD4 reagents etc to all ANC clinics	Distribution and supply chain management of PPTCT related commodities integrated into national overall HIV commodities supply chain. Only issue that was reported to the MTR was stock outs of syphilis test kits
					Review and streamline distribution systems for ARV drugs to ensure continuous supply of ARVs in labour wards, ANC clinics and paediatric clinics	Distribution and supply chain management of PPTCT drugs integrated into national overall ART supply chain (see 2.1.1)– no stock outs of PPTCT ARV drugs reported to the MTR

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
					Build capacity for supply management, including forecasting	Forecasting PPTCT drugs integrated into overall national ART forecasting (see 2.1.1). CHAI is supporting NDoH and Area medical stores with this activity.

Cluster (2.1) Gender-related vulnerability

2.1.2 Multi-sectoral responses to reduce gender-based and sexual violence are implemented	Percentage of HIV prevention programs that report interventions for gender based and sexual violence (PNG)	No data available at this time	80% of HIV prevention programs report interventions for gender based and sexual violence	41% of current partners report on GBV **Unlikely to be achieved**	Review existing GBV, sexual violence and related intervention programs and identify and disseminate lessons learned, with reference to the Family and Sexual Violence Action Strategy and including a clearing house on resources	This activity has not been implemented. The draft National Strategy to address Family and Sexual Violence developed with technical and funding assistance from the PNG-Aus HIV&AIDS program must be progressed further. NACS may facilitate the process. There is no comprehensive multi sectoral strategy to address gender-based violence and NACS and NDoH do not have capacity or strong mandate to lead and facilitate implementation of activities to reduce gender-based violence.
					Raise awareness about the links between gender-based and sexual violence and HIV, and specify violence-free sex as a safer sex practice in all HIV prevention materials and training for the general population, male and female, and for groups at particular risk	Many clinical and non-clinical service providers and partners informed the IRT that gender-based violence is important as both a cause and consequence of HIV&AIDS. Although awareness has been going on for some time, there are new populations to reach with old messages and must continue within the three priority areas especially Priority Area 2 in the new continuum of care model.

					Strengthen the working relationships and referral pathways between health, law and justice and community development services and civil society organisations (Refer to PA3 SP2 Cluster 2.1 Gender 2.1.7)	While health service providers acknowledge gender-based violence as a serious issue within health and HIV services the only provision to address this at the moment is through the Family Support Centres, many of which are not operational. There is no link pathway strategy for continuum of care especially to MARPs and KAPs. NDOH needs to be strengthened to ensure effective service delivery to survivors of GBV. Family and Sexual Violence Action Committee is a critical partner for Health to build relationship with and also work closely with Poro Sapot, Tingim Laip, FHI 360 and NACS and PACS
					Identify and address barriers to reducing gender based violence (for example, by appointing trained female magistrates in village and district courts)	While this is important this activity area would be better placed with the Law and Justice and Community/Social development Sectors.
					Include interventions on gender based violence in all community based HIV prevention projects	This is happening: BUPNG works with Tru Prens (an organisation of women living with HIV) and its district partners to address GBV as part of reducing stigma and discrimination in the community against those infected with HIV and their children and encouraging HIV positive mothers and other women to go for testing and treatment. Others also address **HIV as a consequence of sexual violence** through providing Post Exposure Prophylaxis (PEP) to prevent HIV transmission as the result of sexual assault – including CHASI, PSP, Anglicare, Save the Children (SCi). SCi has also been active in advocacy

						for child sexual assault. PNGDLA provides free legal aid to FSV survivors who are now the majority of their case load.
					Develop and support interventions, including peer support programs, to reduce the vulnerability to sexual exploitation of girls and boys entering puberty	This is important for a multi-sectoral response but may be beyond Health and NACS. This could be undertaken within the Education HIV&AIDS Policy. FBO may also pursue this within their church programs rather than within the HIV&AIDS response resources. NACS can work in partnership with the National Youth Commission's out of school youth programs to implement this activity.
					Develop and support interventions that address the environmental and social conditions that increase violence against women and girls, such as tribal fighting and compensation claims	This activity is particularly relevant for the current high prevalence areas in the highlands because tribal fighting, and compensation claims are high. This activity can be specific to the high prevalence areas of the highlands where the environmental and social conditions are common to create this vulnerability But again, this may be beyond Health and NACS. Provincial administrations could pursue this within their service provisions in the Law and order sector response and community leaders at District and LLG levels. Women's groups can also be used as partners especially at the community level.

Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**

2.1.3 Survivors of gender-based and sexual violence have access to comprehensive services to reduce HIV-related vulnerability	No. of operational Family Support Centres (PNG) (National Indicator#11)	No data available at this time	No target set at this time **New target** to be five (5) fully functioning – two in NCD and three in the high prevalence areas.	**Off-track**	Map and review of existing sexual violence services and strengthen linkages between medical care and treatment, counselling and support, and law and justice	This is not happening. NGOs funded by AusAID give information to their Head quarters and to AusAID but not to NACS and NDoH NGO, CSO and FBO partners providing services need to share information on this to NDoH and NACS. Close working relationship between HDOH, NACS and GBV service providers will ensure of this.
					Establishing new programs and services where gaps exist for continuum of services for male, female and transgendered survivors of sexual violence	Poro Sapot has started this and has received recognitions and support to expand especially with MARPs including transgender persons. Catholic Health services and HIV&AIDS care, treatment, support services provide these services. These will continue because they are inclusive in their duty of care. Tingim Laip is also working with MARPS especially in building their capacity using the step method and Susu Mamas outreach to address loss to follow up due to violence, stigma and discrimination.
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
2.1.4 Men and boys are effectively involved in programs that address gender inequality and gender based violence	Percentage of HIV interventions that effectively involve men and boys in programs that address gender inequality and gender-based and sexual violence	No data available at this time	No target set at this time **New target:** 50% of partners working with KAPs and MARPS to report on this indicator	Limited data **Could be achieved with new target**	Support programs that motivate men to be involved in HIV prevention and care by reinforcing positive and protective aspects of masculinity (for example, by identifying male champions who denounce physical and sexual violence)	Not progressed much. Beyond what NACS and NDOH can do. FSVAC and Development partners and other non-HIV partners can progress this.
					Promote the positive behaviour of men and boys in prevention and care interventions (for example, peer education, identification of male champions and role models)	PLHIV groups such as Tru Warriors and its district network members are doing a lot of this work with assistance from the Western Highlands PAC. PLHIV involvement in the response appears to be

						institutionalised through the PAC. This institutionalisation must be strengthened with the Provincial HIV&AIDS response led by NDOH as recommended by the MTR.
					Support programs that work with male clients of sex workers and men who control the contexts and circumstances of transactional sex to address the issues of vulnerability and to promote safe and non-violent sexual practices	MARPS consulted informed the IRT that the NHS has played a very important part in facilitating the involvement of organisations partners working with MARPS.
					Establish sexual health clinics specifically designed for the needs of men and that provide reproductive and sexual health education	The two Catholic Men's Health Clinics reached 3061 men in 2012, up from 1487 in 2011. This initiative must continue because men lack health seeking behavior and these clinics are also points for testing, treatment for men. No evidence of other such services found. on the government health facilities. The good work must continue.

Priority Area 2: Counselling, Testing, Treatment, Care and Support

Strategic Priority 1: Scale-up HIV Counselling and Testing (HCT)

Cluster 1.1: HCT

Priority Area: (2) Counselling, Testing, Treatment, Care and Support						
Goal: (1) To increase the number of people who know their HIV status and are screened for STIs by expanding access and demand for quality, user-friendly and stigma-free counselling and testing services						
Strategic Priority: (1) Scale-up HIV Counselling and Testing (HCT)						
Cluster: (1.1) HCT						
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.1 General population in rural communities in high prevalence provinces have access to quality, user-friendly and stigma free HCT services through their nearest health service, community based, workplace and/or VCT outreach services	Percentage of women and men aged 15-59 who received an HIV test in the last 12 months and who know the result (UNGASS) (National Indicator#12)	5%	20%	Unknown	Strengthen rural health system capacity (infrastructure, distribution and supply chain, and personnel) to provide quality, user-friendly and stigma free HCT services in high prevalence provinces	There has been significant strengthening of the health system capacity to provide HCT services including PICT and POC rapid testing in high prevalence, rural provinces. The use of POC rapid testing has improved the accessibility of HCT exponentially. The MTR recommends that further scale up of HCT sites needs to be dictated by the judicious use of local level data and mapping of the epidemic including hot spots and geographic clusters of HIV infection. The scale up of PICT is recommended as a more cost effective and efficient model for providing HCT in PNG
					Scale up of quality VCT and PICT services and systems to all health facilities, including services managed by enclave operators, and increase VCT outreach and community based HCT in high burden provinces	The scale up of VCT (HCT) and PICT has been impressive. There are over 800 testing sites in PNG and in 2011 182,000 tests were undertaken. PICT is provided in all health facilities doing HCT – including ANC, STI and TB clinics. Some examples of PICT being provided in hospital based OPD, FP clinics and in A &E departments were reported to the MTR. There were also examples of PICT being used on mobile patrols and outreach.

						However, there is however some evidence that there are barriers to accessing testing with 36% of new HIV infections in 2011 being picked up in inpatient facilities (a likely indication of people presenting with advanced HIV). Likewise testing rates in STI and TB settings are disappointingly low and represent many missed opportunities for diagnosing HIV (see section 1.1.7). Detecting HIV late results in poorer treatment outcomes and also limits the effectiveness of treatment as a prevention modality.
					Increase uptake of HCT services through promoting the value of knowing ones HIV status	The scale up of HCT has been successful – although the promotion of the value of knowing one's HIV status and accessing treatment needs to be better targeted to higher risk populations. The MTR recommends improving referral links between NGOs/CBOs and other groups working with KAPs in the community to HCT and care/treatment services through a strengthened COPC.
					Strengthen supply chain to HCT services	No stock outs or supply chain issues were reported in the past 12 months. The supply chain has improved significantly although the current system is expensive and there are concerns re long term sustainability.

Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.2 General population in urban communities have access to quality, user-friendly and stigma-free HCT services through their nearest health service, community based, workplace and/or VCT outreach services	Percentage of women and men aged 15-59 who received an HIV test in the last 12 months and who know the result disaggregated by (UNGASS)	5%	20%	5% (using data from ARoB and applying to population data) **To be replaced**	Expanding quality HCT outreach services into settlements in urban areas	The MTR recommends that this activity be replaced by the expansion of targeted outreach HCT services to KAP/MARPs (where they live, work and play) rather than focussing on providing HCT in settlements in urban areas Currently there appears to be limited HCT for KAP in the locations in which they live and work. Some NGOs are providing outreach which includes the referral of MARPs to HCT services in the larger urban locations (Port Moresby, Mt Hagen, Goroka, Lae, Madang). Several examples of innovative programming including provision of HCT at sites

	(National Indicator#12)					where large groups of people gather eg the Hagen show) were also noted by the MTR. The provision of outreach HCT needs to be carefully planned using local level data and mapping of the epidemic including hot spots and geographic clusters of HIV infection. Referral linkages between outreach HCT and care and treatment services need to be planned and developed though a strengthened CoPC.
					Support, strengthen, manage and maintain quality HCT services and systems in all urban areas	See 1.1.1
					Strengthen linkages between workplaces and HCT services	The relevance of this is questionable – a more effective strategy would be to strengthen linkage between KAP and their gatekeepers (e.g police/pimps/truck drivers) and HCT services
					Strengthen supply chain to HCT services	No stock outs or supply chain issues in the past 12 months were reported
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.3 Priority target populations have access to quality HCT services that are sensitive to their specific needs, concerns and situation	Percentage of more-at-risk populations that have received an HIV test in the last 12 months and know the result (UNGASS) (National Indicator#13)	No data available at this time	70% **Revised target** **60%**	Not known **Could be achieved with new target**	Stigma and discrimination towards marginalised groups is reduced through training that sensitise and inform HCT workers about the needs of more-at-risk populations (sex workers, MSM, prisoners, etc)	The MTR heard that stigma and discrimination toward PLHIV and KAP has decreased dramatically over the past decade in both the general community and in the health services. However barriers to access of KAP to HCT remain (the MTR heard that in general MARPs/KAP prefer accessing non government supported health services). Programs such as those supported by Save the Children tested 97% of clients who identified as sex workers and MSM in 2012 (an increase from 65 and 72% respectively in 2011) A priority activity as recommended by the MTR is to scale up innovative models to increase uptake of HCT by KAP and MARPS– including provision of HCT in hot spots (markets, PMV stops and sites where sex is exchanged). Linkage of such innovative HCT programming to care and

						treatment services needs to be designed carefully and referral linkages developed
					Programs that work with more-at-risk groups have outreach linkages, partnerships and referral systems to HCT services	As above
					Pilot and establish a mechanism for clients to report stigma, discrimination or poor practice in HCT services	There is currently no mechanism for clients to report stigma and discrimination or poor practice in HCT services - whilst this is an important issue it is not a priority for the next 2 years of the NHS. In the future regular periodic surveys could be carried out at different HCT sites to identify poor practice, stigma and discrimination or a confidential hot line at the national level for clients to report back on any issues on HCT could be developed. A low cost intervention could be to include a comments box for clients to provide feedback placed in all HCT facilities.
					Scale-up availability of quality, user-friendly and stigma-free HCT services in clinics managed by private sector enclave operations	Some private sector enclave operations provide HCT services – although this was not able to be quantified by the MTR
					Develop quality, user-friendly and stigma-free HCT services for people who are incarcerated	This was not a focus of the review – the MTR team heard that there are very few health services available for the incarcerated population. This is an important issue but it is not a priority for the next 2 years of the NHS.

Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.7 Improved linkages between HCT and STI, TB, ANC, ART, family planning, sexual and reproductive health, GBV services and support services through integration of service delivery	Percentage of TB clients who had an HIV test result recorded in the TB register (UNGASS)	TB 4% STI 6%	TB 100% STI 100% **Revised targets**	TB 25% STI (13%) **Could be achieved**	Establishment, strengthen and maintain functional referral pathways to STI, TB, ANC, ART, family planning, GBV services and support services	National aggregated rates of testing in STI and TB services remain disappointing low with only 25% of TB clients and 13% of STI clients recording a counselling/testing episode. Whilst some of this may be related to poor reporting it still represents a massive missed opportunity to find HIV infections (and treat early – particularly in the case of STI infection, those with TB may already

or referral pathways at each HCT service site	(National Indicator#14) Percentage of STI clients who had an HIV test (National Indicator#15)		TB -70% STI – 60%	**with new target**		have more advanced HIV disease). The reasons behind poor testing rates remain unclear with most health care workers reporting that in particular STI clients refuse testing. Heavy workload and human resource issues may also be a factor. The MTR recommends that the NHS and NDoH focus on strategies to increase testing rates in STI and TB clinics. This is an **urgent priority** activity for the remaining years of the NHS.
					Expansion of integrated sexual health, STI and HIV services with the capacity and infrastructure to maintain provision of all services simultaneously	There is good evidence of STI and HIV services being well integrated and provided simultaneously. The MTR notes however that there is less demand (and less service provision) for STI services compared to HIV services with many health care providers reporting that HIV services have 'overwhelmed' STI services. In addition several high volume integrated clinics are capping the number of STI and HCT clients/services that they will see or only offering particular services on particular days – potentially limiting access to services A priority activity over the next two years if for NDoH to examine client flow and possible inefficiencies in HIV service provision so that access to services is not restricted by sites.
					Integration of STI and HIV services into family planning services and integration of family planning into HCT services (link to PPTCT)	The MTR found some evidence of HCT (but not STI) services being integrated into family planning services – but no integration of family planning into HIV services. This is a priority activity – particularly as family planning is an important part of PPTCT and prevention programs Priority activity: Integrate FP services into HIV services
					STI and TB services are strengthened to provide PICT for HIV	See above
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**

1.1.10 All HCT services use point-of-care rapid testing and confirmation, backed by quality assurance programs	Percentage of HCT sites using the 2009 national point-of-care algorithm (PNG) (National Indicator#37)	2%	100% **Revised targets** TB -70% STI – 60%	Not known **Could be achieved with new target** **Revised target** 80%	Escalate roll out of the Point-of-Care rapid testing and confirmation	The scale up of POC testing has been impressive – it is now carried out in 8 provinces of PNG including NCD, Morobe, Madang, ENB, WHP, EHP, SHP, Enga and Simbu. This has contributed greatly to increase testing rates – particularly of PICT for the ANC population. It was reported to the MTR that some health workers still lack confidence and need support in using the POC testing algorithm and giving a result from this. The MTR also heard that there are some issues with the reporting of POC and HCT results which if improved could support the QA for the program
					Establish and strengthen quality assurance and quality control systems for POC testing and confirmation	A QA program has been rolled out for POC testing – with each 20th sample being sent out for confirmatory testing using DBS - to date the CPHL reports no major issues with the EQA system although the MTR was not able to access data to confirm this.
					Strengthen laboratories to support HCT quality assurance systems	As Above
					Ensure HCT services within communities provide privacy and discretion for people accessing services	

Strategic Priority 2: Expand Treatment, Care & Support Services

Cluster 2.1: Treatment

Priority Area: (2) Counselling, Testing, Treatment, Care and Support
Goal: (2) To decrease illness related to HIV and STIs and deaths from AIDS-related illnesses by expanding access to quality, user-friendly and stigma-free treatment services
Strategic Priority: (2) Expand Treatment, Care & Support Services
Cluster: (2.1) Treatment

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
2.1.1 All eligible adults living with HIV have access to quality ART services	Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy (National Indicator#16)	16%	80%	71%* (UA report) This could be an over-estimate due to PLHIV accessing ART at multiple sites **Potential to be achieved with better data monitoring**	Review and strengthen existing ART services, including an analysis of gender-linked factors affecting access and adherence	ART has been successfully scaled up to 87 health facilities (including 20 district health facilities in high prevalence provinces). In 2012 11,764 PLHIV have been initiated on ART (estimated as 71% coverage). This indicates that HIV services have been scaled up in the areas of most need. Crude analysis of program data from 2011 revealed that 88% of those testing positive registered for care services in the same year and of these 60% started ART. Currently there are more women on ART than men – it is unclear whether this is related to the fact that more women than men are tested for HIV, differences in HIV related health seeking behaviour between men and women or differences in the epidemiology of HIV in men and women in PNG. The MTR found that in most HIV services (particularly the high volume ones) – ART is only provided on certain days (with STI and HCT and PPTCT provided on other days) in an attempt to control client flow and work load. The MTR recommends that a detailed examination of how HIV services are provided is undertaken so that inefficiencies can be identified and services can be scaled up in an unrestricted manner taking into account PNG's serious health HR crisis. High rates of loss to follow up of PLHIV on ART were noted by the review and are discussed in section 2.1.10
					Expand access to and delivery of quality adult ART services through improvements in infrastructure and human capacity, including increasing availability of ART in private sector, enclave-based clinics	ART programs have been successfully decentralized in PNG and 20 district level sites now provide ART. The majority of HIV care is provided by nurses and CHWs with some supervision by doctors and HEOs – this model is efficient, practical and appropriate to the PNG context. Capacity building has been systematic and of high quality – guidelines, SOPs and job

						aides are in use and noted to support the consistent provision of quality HIV care. Supervision and mentoring provided by regional HIV medical officers, CHAI, CHASI and ASHM is greatly appreciated and could be expanded into high prevalence provinces with less capacity (e.g Enga and Simbu) Health workers and program managers reported that in 2012-2103 PLHIV are presenting earlier and less immunosuppressed compared to previous years. This is likely due to increased testing and an increase in HIV service visibility and access. The scale up of PIMA CD4 testing has made the decision to start ART easier and more efficient – there appear to be few delays in starting PLHIV on ART in PNG. The MTR heard that KAP/MARPs are under-utilizing clinical HIV services. Some of this was reported to be due to self-stigmatization, some to stigma in the health facilities but the overwhelming finding of the MTR is that prevention services provided by NGOs and CBOs at the community level for KAP/MARPs are poorly linked with clinical HCT and HIV services. The MTR recommends that the Continuum of Prevention to Care model of service delivery be utilized in PNG to strengthen links between PLHIV and KAP/MARPs in the community and clinical services. This will improve access of KAP/MARPS to HCT and care/treatment services, reduce loss to follow up and improve efficiency (for example by ensuring systems are in place for PITC for all TB and STI clients and strengthening TB-HIV co-infection management) It is noted that a Save the Children supported clinic in Boroko, NCD targeting sex workers and MSM will start providing ART this year. The MTR urges ongoing evaluation (including accessibility and efficiency) of this model of care – to see whether it is suitable for scale up in other parts of

						PNG where there are high numbers of sex workers and MSM. Furthermore the MTR recommends that the further scale up of HIV clinical services including ART needs to be driven by improved data collection, management and planning – to carefully target locations where services are needed. The development of packages of core HIV prevention and care and treatment services that can be tailored to local epidemics, geography, infrastructure and access to services would support planners and health managers to undertake this process in a consistent and efficient way.
					Strengthen procurement, storage and supply systems for ART drugs and associated supplies	Major support to overhaul the procurement and distribution of ART, OI drugs and associated supplies has been undertaken in the past 12 months. Major improvement in the supply chain was noted with no sites reporting stock outs in the previous 6 months. This system is highly centralized which is appropriate for the relatively small numbers of ARV drugs that are procured and distributed – however it is also noted to be expensive as it utilizes TNT couriers to distribute drugs on a 1-3 month basis. Management of close to expiring stock was found to be efficient and to avoid wastage.
					Periodic review of national ART guidelines and implementation of recommendations	National guidelines were revised and published in 2012 – these included major changes to first line therapy and PPTCT which have been scaled up across all ART/PPTCT sites in PNG
					Improve forecasting, monitoring and reporting in facilities providing OI and ART	Monitoring and reporting of ART and OI stock appears to be good – with health workers reporting stock numbers in registers on a daily basis – and sending in requests for ART and OI drugs on a 1-3 monthly basis. Drug distribution is linked to reporting – making an incentive for sites to report on time. As noted above there are a number of data issues making the true number of PLHIV on ART difficult to assess.

						Data management issues need to be urgently addressed as they have widespread implications (forecasting, budgeting, assessing coverage and need for scale up, monitoring LTFU etc)

Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
2.1.2 Expansion of ART services to districts and the local level, will be prioritised according to local HIV prevalence	No. of district level ART sites (PNG) (National Indicator#31)	3	62 **Revised target** TBD following mapping exercise	20 **On track**	Expand ART services to district or community level based on HCT data, surveillance and local assessments	See above ART programs have been successfully decentralized in PNG and 20 district level sites now provide ART.
					Promote the importance of treatment	The MTR heard some reports that KAP/MAPRs and the general public are not aware that ART is available nor how it works. The relevance of promoting the importance of treatment to the general population is questionable. The MTR recommends that this be built into the core prevention service package targeted at KAP/MARPS rather than the general public with the key message being the importance of knowing your status and accessing treatment for your own health and for preventing HIV transmission
					Pilot innovative local-level ART support services (for example, by establishing a tiered accreditation so facilities without doctors can refill drugs for 5/6 months and refer to higher level facility for review)	Most of the ART services visited by the MTR were doing so without the specific supervision of a doctor and many were prescribing 4 months of ART suggesting this has already gone beyond pilot phase and is now routine implementation.
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
2.1.3 Access to and capacity to provide effective OI management is increased	Percentage of estimated HIV positive incident TB cases that receive treatment	27%	100%	4%	Support the implementation of current Minimum Standards for OI prophylaxis treatment and care services in all ART services, especially for TB	TB is the commonest OI seen in PLHIV in PNG. Testing rates for HIV in TB patients remain low (25%), health workers reported difficulties in diagnosing TB in PLHIV and it is estimated that only 4% of TB cases receive treatment for both TB and HIV. The rate of use of isoniazid prophylaxis is low at 25%

	for TB and HIV (UNGASS) (National Indicator#17)					Health workers reported to the MTR that they lack confidence in treating TB - HIV co-infected patients and are reluctance to use Isoniazid prophylaxis. They also reported issues with infection control – lacking the infrastructure and equipment to sequestrate and manage clients with potential TB infection. NDoH & implanting partners have met recently and have developed a road map to improve TB-HIV co-infection in PNG including: • Screening 100% HIV clients for symptoms of TB at each visit • Aggressive scale up of Isoniazid prophylaxis • Prescribing TB drugs in the ART clinic • Capacity building and co-location of HIV and TB service providers • Development of a national TB-HIV collaboration guideline and algorithm • Setting up a TB case-management/coordination team The MTR supports the above road map and also recommends that the national TB registers be updated to more clearly include columns to document whether a client has had PITC and the test result.
					Periodic review of national OI guidelines and promote TB screening in all ART services	As above
					Improve the capacity in monitoring and reporting on utilisation of drugs for OI	See 2.1.1
					Increase capacity of health workforce to provide quality adult prophylaxis, diagnosis and treatment of OIs according to national treatment guidelines	As above
					Ensure secure procurement, distribution and storage of quality	See 2.1.1

					drugs, test kits, reagents and associated supplies for OI services	

Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
2.1.10 Develop, implement and scale up a range of ART and OI adherence interventions	Percentage of adults and children with HIV known to be on treatment at 12/24/36/48 months after initiation of ART (UNGASS) (National Indicator#18)	82% 12/12	90% 12/12 **Revised target** 85% at 12 months	78% NDOH d/base (73% at 24/12 and 48% at 60/12) **Likely to be achieved with new target**	Develop, trial and implement a range of interventions and tools to improve treatment adherence (e.g. counselling services, nutrition support, treatment companions, preventing drug stock outs, use of mobile phones, pill boxes)	There are a number of issues with the ART cohort data in PNG. Data is complete in sites that have the resources to use the NDoH electronic data base but it was apparent to the MTR that the database is not used in all ART sites in PNG – mostly due to lack of staff to do the data entry. In sites not using the database there is no paper based system (e.g the WHO ART cohort paper based register system) to follow cohorts of those started on ART. The rate of retention of PLHIV on ART reported by the NDoH database rate is reasonable but it is unclear whether this reflects the real situation in PNG. The MTR found high rates of LTFU at the site level – evident upon reviewing registers documenting the numbers of PLHIV ever started on ART and comparing it to the numbers continuing on ART. At many sites LTFU rates were noted to be between 50-60% of those ever started on ART. It is unclear as to whether this reflects real loss to follow up or is related to 1) difficulties in managing ART cohort data or 2) PLHIV are accessing ART across multiple sites (which was reported to be very common) The extent of the LTFU issue needs to urgently be ascertained as it has serious implications for the durability and success of PNGs first line ART regimes – noting that recent data from CPHL has documented transmitted resistance in ART naïve PLHIV in Port Moresby at 15%. Some programs (CHAI) have successfully reduced LTFU by employing case managers to follow up PLHIV on ART. The MTR recommends that the expansion of such a model be reviewed – or

						consideration of increased use of NGOs, CBOs, PLHIV peers and volunteers through a CoPC be utilized to track LTFU clients.
					Support ART workers to improve pre-treatment education session, on-going adherence	The MTR found all sites are undertaking pre-treatment education sessions. The MTR recommends that improved linkage with NGOs, CBOs and peers working at the community level through the CoPC would further support adherence and minimize loss to follow up.
					Ensure HCT services within communities provide privacy and discretion for people accessing services	See 1.1.3

Cluster 2.2: Paediatric Treatment

Priority Area: (2) Counselling, Testing, Treatment, Care and Support						
Goal: (2) To decrease illness related to HIV and STIs and deaths from AIDS-related illnesses by expanding access to quality, user-friendly and stigma-free treatment services						
Strategic Priority: (2) Expand Treatment, Care & Support Services						
Cluster: (2.2) Paediatric Treatment						
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Key activities**	**Progress: Comments**
2.2.1 Management and coordination capacity of Paediatric AIDS services strengthened and linked with maternal and child health services at national and sub national levels	Percentage of health facilities that offer paediatric ART (i.e. prescribe and/or provide clinical follow-up) (UA) (National Indicator#33)	9%	57% **Revised target** 100% of pediatric OPD in provincial hospitals 50% of district	32 sites **Likely to be achieve with new target**	Management & coordination to strengthen quality implementation of programs integrated with MCH services	Currently most paediatric ART service provision is provided at provincial referral hospitals. The decentralization of paediatric ART to the district level has commenced however is lagging behind that of adult ART (this pattern is seen in many countries in the region). The majority of health care providers interviewed by the MTR team indicated the willingness to provide paediatric ART services – but requested capacity building and support to do this. Given the geographical challenges of PNG it is entirely appropriate for paediatric ART to be provided at the district level in sites where there is capacity and enough children infected with HIV

			health centres in high prevalence provinces			on ART to make this feasible and efficient. The MTR urges the ongoing targeted decentralization of paediatric services supported by capacity building and ongoing supervision. The MTR anticipates that the provision of 'family centered' HIV care (linked with existing MCH services in a one stop shop through the CoPC will enhance adherence and reduce loss to follow up. The target that 57% (of all health facilities) offer paediatric ART is neither relevant nor effective/efficient given the nature of PNG's geographically concentrated epidemic. The target needs to be revised down to a more realistic and appropriate figure – this should be done in consultation with a mapping exercise which matches the need for additional paediatric ART services with epidemiological data.
					Increase visibility and advocacy to ensure attention and integration of PPTCT and Paediatric AIDS programs within MCH services	See above There is scope to greatly enhance linkage and coordination of PPTCT and paediatric HIV services by conceptualizing service delivery and implementing services across a CoPC.
					Evidence based up to date guidelines and policy documents to ensure quality implementation of the programs	The 2012 PNG care and treatment guidelines are up to date and in keeping with the latest WHO recommendations. No further action required at this stage

Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
2.2.2 Quality of delivery of Paediatric AIDS services is improved with expanded access to Early Infant Diagnosis, testing and treatment, care and support for all children with linkages with MCH and PPTCT services	Percentage of infants born to HIV infected women who are started on cotrimoxazole prophylaxis within two months of	No data available at this time	80% **Revised indicator**	17% UA (select sites)	Scale up services to ensure that health care facilities at regional, provincial and district level are delivering quality Paediatric AIDS services, including Early Infant Diagnosis, with strong continuum of care for all positive children	Currently EID has been scaled up to all provinces in PNG and is offered by 53 facilities. Analysis of NHIS data reveals that in 2011 93 infants <1 and aged 1-4 were initiated on ART – this most likely reflects infants diagnosed by the PPTCT program. As noted in the PPTCT section whilst there has been impressive scale up of PITC in PNG – the

	birth (UNGASS, UA GFATM) (National Indicator#34)		**and target** Suggest replace with more appropriate indicator % PPTCT sites with access to EID or % HIV infected infants commenced on ART within first 4 months of age.			success of the PPTCT program (and getting infected infants on treatment early in life) is limited by the fact that only 50% of women in PNG access ANC services. The fact that only 17% of infants born to HIV infected women were started on Cotrimoxazole prophylaxis is hopefully a reflection of the fact that most PPTCT infants tested negative at EID performed at 2 months – rather than a deficiency in HIV programming for children in PNG Given the scale up of EID and early infant treatment in PNG – the indicator referring to Cotrimoxazole prophlyaxis within 2 months is no longer particularly important or relevant and should be dropped. It should be replaced by a more appropriate indicator such as one relating to % PPTCT with access to EID or % HIV infected infants commenced on ART within 2 months of age. Whilst the scale up of EID and early infant treatment has been impressive there is possibly a gap in access to ART for older children. Whilst 93 infants aged <1 and between the age 1-4 were initiated on treatment in 2011 only 33 between the ages of 5-14 were initiated on ART in 2011. Without knowing the number of children continuing on ART it is difficult to analyse this data to confidently state there is a gap in service delivery for older children – but the MTR recommends that this is an issue requiring further review.
					Enhanced outreach and community services to increase registration of all positive children and decrease loss to follow up with a focus on HIV positive children	The MTR recommends that improved linkage with NGOs, CBOs and peers working at the community level with KAP/MARPs through the CoPC would further support identification of positive children, improve adherence and minimize loss to follow up.

					Enhance communication activities including mass media campaigns, social mobilisation campaigns and inter personal communication to increase awareness on services and improve utilisation	Mass media campaigns and social mobilization are unlikely to have much impact on improving access of HIV infected children to services. The MTR recommends that this activity be re-configured to focus messages regarding the importance of getting children of index cases referred for counselling and testing and HIV care and treatment through focussed prevention activities for KAP/MARPs and through PPTCT programs (testing all family members when mother diagnosed positive)
					Strengthen delivery of quality laboratory services to support implementation of Paediatric AIDS programs	EID services and CD4 testing continue to be scaled up in PNG – the current focus is on high prevalence provinces which is appropriate and efficient.
					Ensure quality paediatric counselling for children and families/parents/ care givers	The MTR did not specifically review this issue – the HIV care and treatment guidelines reference paediatric counselling in the sections on PPTCT and paediatric treatment.

Cluster 2.3: Sexually Transmitted Infections (STI)

Priority Area: (2) Counselling, Testing, Treatment, Care and Support						
Goal: (1) To increase the number of people who know their HIV status and are screened for STIs by expanding access and demand for quality, user-friendly and stigma-free counselling and testing services						
Strategic Priority: (2) Expand Treatment, Care & Support Services						
Cluster: (2.3) Sexually Transmitted Infections (STI)						
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
2.3.1 Free quality STI screening and management is accessible in all health facilities, including ANC services	Percentage of health facilities that provide STI screening and syndromic management	50%	100% **Revised target**	Not known **Could be achieved**	Scale up and strengthen the syndromic management of STIs at local level health facilities (including on-going pre- and in-service training) which follow nationally approved treatment guidelines	Currently the management of STIs is not covered under the NHS Top 10 Interventions. Given the relationship between STIs and HIV is likely a key driver of the HIV epidemic in PNG and that the burden of STIs is so high in PNG the MTR is recommending that it be a priority

	(PNG) -(National Indicator#35) **<u>Revised Indicator</u>** "Free quality STI screening and management is accessible in all facilities where HIV services are provided"		100% of provincial hospital OPD and 80% of district health centres in high prevalence provinces provide STI screening and management			activity over the remaining years of the current NHS. This strategic objective is sound although as an HIV intervention it needs to be better targeted to ensure that it is relevant to HIV programming All major provincial and several district hospitals are providing integrated STI (syndromic management), HIV and HCT services. In a number of the large volume sites visited by the MTR clients presenting for STI services represented <20% of those attending for HIV and HTC services. Only a small proportion of STI clients are getting tested for HIV. Many health workers interviewed by the MTR perceived that higher risk KAP are not attending STI services The MTR recommends that the suitability of the syndromic management approach to STI management is carefully reviewed in PNG (this was also recommended by the evaluation of the PASHIP project). This review is required for a number of reasons including 1) Behavioural data from PNG points to significant rates of anal sex (unprotected) between heterosexual men and women. 2) Many rectal STIs are asymptomatic and women are unlikely to report anal symptoms to an STI clinic, 3) Asymptomatic infections are of important significance in higher risk KAP and are not picked up by syndromic management. The feasibility of providing STI screening using PCR testing (and in the future – hopefully POC testing) will need to be carefully examined – along with an assessment of the risks of changing from syndromic management to aetiological management and regular screening of

						symptomatic and asymptomatic KAP. Periodic presumptive treatment of KAP at high risk for repeated STIs may also be considered.
					Ensure STI clients are attended to by health workers of the same sex who are trained to provide equitable and gender- and age-sensitive service in a non-judgemental manner, respecting privacy and confidentiality	In the sites visited by the MTR, STI services were always provided by health workers of the same gender.
					Train health workers to recognise non-symptomatic STIs among women, and the symptoms of STIs associated with oral or anal sex	As above
					Scale up the capacity for the laboratory testing for common STIs at all provincial and district facilities where laboratory capacity exists	As above
					Conduct periodic microbial resistance studies for STIs and review and implement recommended changes in national guidelines	
					Implement STI drug storage and distribution to facility level under the direct supervision of the PDCO	
					Monitor the availability of appropriate point-of-care STI testing kits	

Cluster 2.4: Community and Family Support

Priority Area: (2) Counselling, Testing, Treatment, Care and Support
Goal: (3) To improve the quality of life of people living with and affected by HIV through expanded access to quality, user-friendly and stigma-free care and support services
Strategic Priority: (2) Expand Treatment, Care & Support Services

Cluster: (2.4) Community and Family Support						
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
2.4.1 Home Based Care (HBC) and Community/Family Support effectively linked to HIV clinical services, including nutrition support	Percentage of ART services that are linked to HBC and other family and community support services (National Indicator#36)	No data available at this time	100% **Revised indicator** Percentage of ART services that are linked to community support services to maximize retention in care	Not known	Strengthen the capacity of community health workers and health facility staff to deliver and support HBC, palliative care, nutrition services and other community support programs, particularly in high prevalence provinces	Most ART services in PNG are reported to be linked to community support services provided by NGOs, FBOs and CBO. The level of support or what is exactly what services are provided has not been quantified. As the coverage of ART in PNG has scaled up, the need for traditional home based care and support – focussing on 'palliative care' has reduced. Given the high rates of LTFU in addition to issues of access to services by KAP/MARPs the MTR recommends that HBC activities be reconfigured to prioritize peer outreach and linkage of PLHIV and KAP to care services to ensure that newly diagnosed PLHIV and those who have been lost to follow-up are enrolled into care and stay in care. The indicator for this activity needs to be revised in accordance with the above.
					Mobilise communities to provide care & support, including local health services, community leaders, churches and local civil society organisations	As above
					Scale-up availability of HBC programs and resources to communities, particularly in higher prevalence provinces	As above
					Develop and strengthen referral systems and localised coordinating mechanisms for improved service provision between health services and community support programs and vice versa	As above
					Standardise the contents of HBC kits, recognising the different needs of male	As above

					and female PLHIVs, and develop appropriate procurement & distribution systems to ensure kits reach families & communities in need	
					Strengthen capacity of PACs, faith-based, PLHIV and non-government organisations to work with families and communities to provide care and support, including nutrition services to PLHIV and support for carers, particularly in high prevalence provinces	As above

Priority Area 3: Systems Strengthening

Strategic Priority 1: Improve Strategic Information Systems

Cluster 1.1: Monitoring, Evaluation and Surveillance

Priority Area: (3) Systems strengthening						
Goal: (1) To improve the collection, management, analysis, dissemination and use of strategic information to guide the response.						
Strategic Priority: (1) Improve Strategic Information Systems						
Cluster: (1.1) Monitoring, evaluation and surveillance						
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.1 National HIV, AIDS and STI M&E and surveillance frameworks are developed and adopted by all stakeholders	Section V of the NCPI Part A (National Indicator#25)	No data available at this time	By 2015, 100% of major stakeholders (spending more than K100,000 per year) have adopted the National HIV, AIDS and STI M&E and Surveillance Framework	No data available at time of MTR on number of stakeholders who have adopted the National Surveillance Framework **Could be achieved**	Establish multi-sectoral national M&E and surveillance technical working groups with clear TOR including coordination systems Develop an integrated and gender-sensitive M&E and surveillance framework consistent with the NHS in consultation with all stakeholders and partners Review and strengthen the existing mechanisms and systems to ensure that all stakeholders, including donors and implementing partners, develop their M&E activities and program indicators within this framework Develop annual costed plans for program monitoring bio-behavioural, medical, social and behavioural research	• In 2011 it was decided by the National Oversight Committee to combine the Surveillance Technical Working Group and the Monitoring and Evaluation Technical Working Group to form a single National Strategic Information Working Group (SITWG). This group has not met regularly in the last 12 months. • A comprehensive costed national surveillance plan for 2011-2013 was developed based on the NHS and approved by the Ministry of Health, NAC and other key stakeholders. Due to the limited available technical and financial capacity a majority of the activities in this detailed plan proved to be

					Align the current national HIV M&E and surveillance databases with the new framework and ensure that it is updated regularly based on data coming from all sources	unachievable. A national STI/HIV surveillance meeting in March 2012 recommended suspending this comprehensive national surveillance plan until 2013 and instead focus on key activities. It was also recommended that the situation be reviewed again at the end of 2012; this review did not take place. • Comprehensive information on the M&E and surveillance data collection activities of stakeholder organisations (donors, implementing partners etc.) was not available for this Mid-Term Review. • National HIV and M&E databases are poorly maintained and most are significantly incomplete due to breakdown in flow of data from the field. Lack of consolidation, with M&E and surveillance database systems overseen by NACS and NDoH respectively but operating in parallel.
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.1.2 Provincial M&E and surveillance systems are established, equipped, and	Section V of the NCPI Part A (National Indicator#25)	No data available at this time	By 2012 50% of the ProMEST teams are able to effectively collect, analyse, report and	From the limited information available it appears that only a minority of ProMESTs	Undertake a comprehensive review of all ProMESTs, starting with higher prevalence provinces, to identify critical gaps and weaknesses and develop appropriate actions to strengthen the effectiveness of each ProMEST	• While it is evident that some progress in expanding and strengthening ProMESTs across the country has been made, particularly in high burden provinces, a comprehensive national review of

enabled to collect, analyse, report and disseminate information and data as part of the national framework			disseminate data	have developed this capacity. Currently only a limited amount of surveillance data is currently provided by ProMEST to NDoH. **Could be achieved**	Develop a data audit and supervision strategy and implementation plan and integrate into the annual M&E and surveillance plans	ProMESTs has not been undertaken and consequently critical gaps and weaknesses may not have been identified or addressed. • NACS is responsible for coordinating M&E efforts at the national level. This includes supporting Provincial AIDS Council Secretariats (PACS) and the development of Provincial Monitoring and Evaluation and Surveillance Teams (ProMEST) tasked with coordinating M&E activities at the provincial level. From the information available it appears that not all ProMESTs are currently collecting and reporting M&E or surveillance data, very few are forwarding such information to NDoH or NACS, and any information that is collected is not analysed.

Cluster 1.2: Biological, Behavioural, and Bio-behavioural Surveillance

Priority Area: (3) Systems strengthening						
Goal: (1) To improve the collection, management, analysis, dissemination and use of strategic information to guide the response.						
Strategic Priority: (1) Improve Strategic Information Systems						
Cluster: (1.2) Bio-behavioural research						
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
1.2.1 Integrated bio-behavioural and behavioural surveillance is conducted based on the national surveillance framework	Number of bio, behavioural, and bio-behavioural surveillance studies conducted annually	Seven behavioural and nine bio-behavioural	1. One bio-behavioural survey among general population 2. One bio-behavioural survey among more-at-risk populations	1. National household IBBS that was to have been conducted in 2012 has been postponed. 2. Several BSS among MARPs have been conducted, but have not included repeated sentinel surveillance. **Achievable**	Conduct regular integrated bio-behavioural surveillance and behavioural surveys and research among the general population and more at risk groups Review laws that affect the design and implementation of bio-behavioural surveillance (e.g. HAMP Act) to identify unreasonable obstacles and propose amendments	• A sustainable model for BSS has not been established in PNG. Behavioural studies conducted to date have largely involved a small number of sites and a single time period only. The National Research Institute (NRI) undertook a series BSS in a number of different at risk groups. The data for these studies were collected prior to 2011 and are valuable as baseline data for future surveys if repeated. Behavioural surveillance studies aligned with the NHS have not been planned. • A national household IBBS was planned for 2012; however, due to a number of factors the planned start date was delayed. Subsequent substantial increases in the projected costs of undertaking this extensive survey resulted in a decision to halt this activity. At the time of the MTR it was unclear when this IBBS might go ahead and whether or not the contract to undertake this work would be retendered.

Strategic Objective	Indicator	Baseline	Target	Status	Major activity areas	Progress: Comments
1.2.2 Build the capacity of NDoH, national research and academic institutions to conduct integrated bio-behavioural and behavioural surveillance	No indicator set at this time	No data available at this time	No target set at this time	**Achievable**	Assess the capacity of NDoH, and research and academic institutions to conduct IBBS and BSS and develop a capacity development plan Ensure that all contracts and consultancies for bio-behavioural and behavioural surveillance include provisions for developing the capacity of PNG counterparts, including post-graduate students	• A comprehensive assessment of the capacity of NDoH and key research institutions to conduct IBBS and BSS has not been undertaken, and accordingly a capacity development plan has not been formulated. • The implementation of an IBBS requires the establishment of substantial trained research workforce, engaged for a relatively short period of time. While developing such a workforce is certainly desirable, the investment required to do so would be considerable and may be difficult to justify if the developed expertise will be utilised only for this IBBS. • The recent behavioural surveillance studies led by NRI established a small cohort of trained researchers. NRI is, however, no longer funded to conduct such BSS and it is unclear whether or not the team of local researchers involved in these previous studies are engaged in ongoing research activities. • In the absence of plans for ongoing BSS and uncertainty around the national IBBS, there are few opportunities to develop research capacity through the implementation of such activities in the short to medium term.

Cluster 3.1: Capacity Building

Priority Area: (3) Systems strengthening						
Goal: (5) To build the capacity of people, communities and organisations to mobilise, coordinate and implement the HIV response at all levels.						
Strategic Priority: (3) Strengthen organisational and human capacity for coordinating and implementing the National HIV and AIDS Strategy						
Cluster: (3.1) Capacity Building						
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
3.1.1 Strengthen the capacity of the National AIDS Council Secretariat to effectively coordinate and manage the implementation of the NHS	NHS annual plan and budget submissions and annual parliamentary report completed on time	NSP Annual Plan submitted on time in 2008 and 2009 Annual report not submitted in time in 2009	NHS Annual Plan, budget and parliamentary reports submitted on time each year	Annual plan submitted each year. No parliamentary reports submitted in the last 3 years **Achievable**	Build the capacity of NACS personnel who will coordinate and manage the NHS and establish effective systems for coordination	NACS has been re-structured, and staffing reduced to 40 persons within HQ; 60 in the provinces. NACS staff in the new structure have been mentored and supported through various donor supported technical assistance. It is difficult to assess their level of progress in performance capacity. Key positions, such as Regional Managers and HRCs for coordination have very good TOR, and roles and responsibilities are appropriate. The personnel in these positions need to be trained to implement the roles and responsibilities.
					Implement merit-based recruitment and effective performance management	Many new staff have been recruited under the new structure. A new Chair and Council has been appointed; as well as a new Director. NACS has identified three performance management targets each year, as required by the whole of government performance management system; for 2013-16: **1. Prevention**

						Develop and scale-up targeted HIV and STI combination prevention interventions for more-at-risk populations (MARPs). 2. **Testing, Treatment, Care & Support** Significantly increase availability of point-of-care rapid testing, with an emphasis on provider initiated counselling and testing (PICT), STI and TB services. Need to work with Provincial Government and District for funding to establish at least one VCT site in all Districts. Ensure the collaboration of National and Provincial Health authorities on integration of STI/HIV and TB services at district levels. 3. **Systems Strengthening** Complete rolling out Provincial Engagement Framework with all remaining Provincial Government and establishment of Jiwaka and Hela Provincial AIDS Committees (PAC).
					Ensure NACS has effective systems for coordination including oversight committees and coordinating mechanisms with major implementing partners	NACS has established a Steering Committee to oversee the implementation of the NHS. NACS' M&E Oversight Committee, however, was not functional in the last few years. Some technical committees are functional such as the NHS TWG. A new committee is being formed. Coordination of the funded NGOs have been a challenge for NACS in the last few years and is predominantly managed by AusAID. NACS should concentrate on facilitating networking and building partnerships for program implementation and not as a distributer of funds which is not their core business.
					Implement and annually review NHS Planning and Reporting Cycle Guidelines	This process has been well-established since 2006; but review of recent annual plans, both

						centrally and at provincial level, reveals significant weaknesses. Due to reduction in funding to NACS for channelling of funds to the sub-national level, however, a new process needs to be developed to access the funds at local level.
					Establish a national HIV prevention taskforce with representation from key stakeholder groups	This has never been established. A draft National Prevention Strategy was prepared, but dropped.
					Strengthen NACS to manage, coordinate and monitor funding allocation, TA allocation and grant system	NACS prepares an Annual Plan, ostensibly coordinating and combining all funding allocations within the NHS framework. The Plan for 2013 was reviewed: this contained NACS funding, and AusAID funding only – UN system, GF, USAID and other funding was not included. Large grant management is mostly done by donor partners (AusAID). Small to medium level Grants have been managed at the PACS level, but success and effectiveness of this was not assessed in the NHS MTR.

Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
3.1.2 Strengthen the capacity of PACs and DACs to effectively coordinate the implementation of the NHS	Percentage of PACS and DACS that have received their quarterly disbursements and send in quarterly and annual reports on time (PNG)	2009 24% of acquittals were submitted 2009 5% of PACS submitted complete acquittal	90%	<20% **Achievable**	Build the capacity of existing and new PAC and DAC employees and volunteers through a performance management system and other interventions, initially in high prevalence provinces	The Provincial Engagement Framework has been developed; MoU have been signed with provinces; and a 3-volume set of Guidelines on "MANAGING AND COORDINATIING SUB-NATIONAL HIV ACTIVITIES" has been developed. PACS remain very varied in their capabilities, capacity and performance, however. Only a small number of provinces have established and funded DACs. However, the

		2009 55% of PACS submitted no acquittal				functionality of the DACs as a country-wide mechanism needs to be challenged: high prevalence provinces may need them; low prevalence provinces probably don't. The MTR considered that NACS' sub-national links through the Regional Managers is very weak. There were no annual reports of their engagements with PACS and sub-national level partners' engagement in implementing the NHS.
					Conduct human and organisational capacity assessment of PACs and priority DACs (including review of TOR, performance management and job descriptions) including the views of partner organisations, initially in high prevalence provinces	This assessment has not been done; but in view of the MTR recommendation for a new road map for NDoH and NACS partnership, this can be undertaken then.
					Ensure PACs and DACs have effective systems and adequate staffing for coordination including oversight committees and coordinating mechanisms with local implementing partners	The functions and capacity of PACS and DACs are highly variable. Many PACS (50%) have new staff and need capacity building for effective coordination work. This can be undertaken by the Provinces in the new model of working where sub-national level funding to HIV&AIDS will be institutionalised within the Provincial Administrations. This has happened in Markham District in Morobe Province.
					Establish effective and transparent small and large grants and TA programs for NGOs, FBOs and CBOs which is linked to NHS planning cycle with clear criteria,	Large grants are managed by donors – primarily AusAID. Success of small to medium grants by NACS and PACS could not be assessed fully in this MTR. The impression from the field, however, was that much of the small grant-making has been directed at generalised activities in the

					performance indicators and a capacity needs assessment	general population, and is not 'high impact' – far more focused work is required.
					Increase capacity for NGOs, FBOs and CBOs to access GoPNG and development partner funding through, for example, improved capacity in writing funding proposals	This area needs to be assessed separately. There are already 13 organisations being funded and donor funding will go where there is proof of capacity to solicit and acquit funds effectively.
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
3.1.4 NGOs, FBOs and CBOs demonstrate improved capacity to effectively manage HIV and AIDS funds, human resources and programs	Percentage of NGOs, FBOs and CBOs submitting their plans and reports to their PACS or NACS on time (PNG) (National Indicator#19)	No data available at this time	90%	100% in the case of AusAID funded implementing partners **Achievable**	Conduct periodically reviews of the capacity of key NGOs, FBOs and CBOs to manage programs and funds	This is not done through a formal and systematic arrangement. Each Civil Society Organisation (CSO) does its own needs assessment. Current partners' capacities are assessed when annual reports of funded activities and new funding proposals are submitted to donors such as AusAID.
					Improve the capacity of NGOs, FBO and CBOs to manage funds, human resources and programs (for example, develop tools and provide TA)	This is not done through a formal and systematic arrangement. Each Civil Society Organisation (CSO) seeks assistance individually as need arises.
					Establish systems and regular opportunities to share best practice and lessons learned in HIV program and financial management	Regular NGO forums are conducted for NGOs funded by AusAID at the national level. Stakeholder forums at the sub-national levels are also held but not regularly and not in all provinces. It is highly depended on availability of funds.
					Build the capacity of PACSO to coordinate, advocate for, and support civil society	Igat Hope Inc.is functional although it needs TA support. The technical support must be task specific-in this case technical assistance with

					organisations to better implement the NHS	organisational development and networking specialist – not another Technical Adviser The other NACS' 3 Umbrella Organisations (PACSO CLAHA, YAHA) are dysfunctional. BAHA, the private sector supported coordination mechanism is fully functional.
Strategic Objective	**Indicator**	**Baseline**	**Target**	**Status**	**Major activity areas**	**Progress: Comments**
3.1.5 Increase technical assistance at sub-national level	Percentage of technical assistance deployed to support the NHS implementation at sub national level	No data available at this time	75%	50% progress through the non-state actors working at the sub-national levels	Issue periodic reports on the location and focus of TA at the national and sub-national level	Although technical support is provided by the various donor partners it needs to be more targeted according to specific areas of need.
					Include requirements for TA in NHS planning submissions	This is not done as a formalised system of support but on individual needs.
					Establish and scale up a TA mobilisation and partnership system to improve linkages between organisations that need TA and organisations that provide TA	This is yet to be done and formalised. This can be done as part of the road mapping for new role and responsibilities for NACS.
					Evaluate and share the learning from existing TA programs at the sub-national level	This is done regularly through the national level NGO forums convened for NGOs funded by AusAID.

Annex 2 Recommendations mapped to the NHS Top Ten Interventions

NHS Top 10 Interventions	MTR recommendations
Priority Area 1: Prevention	
1. Develop and scale up combination prevention programs for addressing multiple concurrent sexual partnerships in locations where this behaviour is common	**Continue:** **Institutionalize and roll out the National Strategy for Comprehensive Condom Programming (CCP)**. The Strategy can be used as a framework to focus, sharpen, strengthen and track condom promotion and use across the whole range of risk situations in the country: high risk, more at risk, and general population. This can achieve three outputs: i) effective harm reduction in multi-partner sex through consistent condom use, lowering HIV transmission risk significantly, ii) continued general population awareness of and access to condoms as a fundamental and cost-effective HIV prevention strategy, and iii) integration of HIV in wider sexual and reproductive health programs. The Strategy is sufficiently robust, as outlined, to ensure all three outputs, if it is institutionalised and implemented vigorously. By 'institutionalise' is meant the full and formal recognition that this is the primary framework for achieving the NHS Strategic Objectives 1.1.2, 1.1.3, 1.1.6, 1.1.7, and 1.1.8; that NACS and NDoH ensure that the operational and governance provisions for the strategy are implemented in full; and that partners recognise and accept this. **Add:** **Male circumcision should remain within the potential scope of prevention programming in PNG; but not among the top ten priority interventions until better data are established from the surveillance system, and the cost-effectiveness of the intervention effectively modelled.** Male circumcision is a potentially important biomedical intervention for the prevention of HIV. Circumcised men have a ~60% reduction in the risk of acquiring HIV during vaginal sexual intercourse with females. A HIV modelling exercise undertaken by the Kirby Institute in 2010 found that the impact of male circumcision on the HIV epidemic in PNG is difficult to ascertain due to the wide range of traditional penile cutting practices (involving slitting or partial removal of the foreskin) which are relatively common in PNG. However they did calculate that circumcising men with no form of penile cutting could potentially have a small impact on the HIV incidence in PNG. Furthermore they estimated that prioritising circumcision uptake to men aged between 15 and 35 years will result in a greater cost-benefit ratio (as compared to promoting circumcision to men of all ages?) in addition to prioritising men at increased sexual risk of HIV (such as STI clinic attendees or clients of FSWs). Concerns about operationalizing circumcision in PNG have by and large prevented any scale up of

	circumcision as a prevention activity. A working group to look at this issue has been formed but to date the issue remains dormant.
2. Develop and scale up targeted HIV and STI combination prevention interventions for more-at-risk populations (MARPs)	**Continue, expand and focus:** **1. Ensure that comprehensive, targeted interventions for high-risk situations and populations are the priority focus within CCP.** The CCP is presently undifferentiated regarding prioritization of target groups. It is important that priority focus is given immediately to high-risk situations and populations, as these are where the most immediate, and highest impact results for the national response will be achieved. In this regard, on-going work on MARP identification and typology (by NACS with AusAID support), size estimations (NACS with UN support), and mapping, scale up and implementation by organisations such as Tingam Laip, BUPNG, Anglicare, FHI, etc. are well-coordinated coherently within the CCP framework. At the same time, these interventions need to be closely linked and aligned with service delivery under the Continuum of Prevention and Care (see below). Ensuring this coherence should be a priority for NACS, working closely with NDoH. **2. Ensure that the prevention is adequately incorporated into the continuum of prevention and care (CoP&C).** As noted above, the separation of prevention from service delivery is artificial. As the continuum of care for service delivery matures, it is essential that prevention is fully incorporated. This will be particularly important for MARP interventions, where consistent condom use, user-friendly STI treatment and counseling and testing, and access to care is essential if interventions are to be fully acceptable and accessed – which is the fundamental pre-requisite for effective MARP interventions. The CoPC builds onto the 'continuum of care' – an approach which has been used around the world to successfully provide a comprehensive HIV program that meets the needs of clients. Incorporating prevention into the continuum of care will support strong referral linkage between prevention activities for MARPs which primarily occur at the community level and are carried out by NGOs, CBOs and FBOs to clinical services (HCT, PPTCT, STI screening and management, FP and HIV care and treatment) which are primarily provided by GoPNG and FBOs. Having strong referral linkage is important both to facilitate and enable MARPs access to services but also to ensure that they are retained in care and get the full complement of services that they require to stay healthy and minimize transmission of HIV to others in the population.
	Reduce the priority status of SO 1.1.4, combine SO 1.1.6 and 1.1.7, and drop SO 1.1.9. SO 1.1.4 concerns partner reduction. This should not be considered a priority under the current epidemiological and socio-cultural dynamics in the country. Partner reduction per se is unlikely to be possible on a scale large enough to have a

	significant impact on the epidemic in the short term. In addition, given the rapidly changing socio-economic situation in the country, such an intervention is far beyond the scope of the HIV response; it has far wider socio-cultural implications, and is better addressed through larger socio-economic development programs. As noted above, the distinction between SO 1.1.6 and 1.1.7 (between sex work and transactional sex) is questionable; the aims of both SOs can thus best be achieved by combining them. Finally, SO 1.1.9 (identifying other more-at-risk populations), again as noted earlier, is unlikely to become a priority within the life of the NHS. Although the data are minimal, general wisdom is that the majority of new infections are taking place within ;'transactional sex/sex work'.
3. A significant improvement in the availability and accessibility of male and female condoms through condom social marketing and distribution. This must include addressing stigma, myths and misinformation around condom use	**Continue, but as a sub-activity of 1:** **Institutionalize and roll out the National Strategy for Comprehensive Condom Programming (CCP)**.
4. Develop specific interventions to reduce HIV vulnerability associated with gender based violence and sexual violence against women and girls	**Adjust:** **NACS & NDOH should use their experience and current base to facilitate a Government dialogue and endorse a National Strategic Framework to address Family and Sexual Violence**. All implementing partners listed to implement this strategic objective should advocate for a Parliamentary Committee be established to address GBV, VAW, Family and Sexual Violence. NACS has a role to play, given the importance of GBV in the HIV response, in facilitating greater coordination among partners. **7. NDoH should work with AusAID, UNAIDS, USAID and other development partners to map and review existing sexual violence services and strengthen the linkages between medical care and treatment, counseling and support and law and justice**. Given that the MTR is recommending that the HIV&AIDS response for the reminder of its term focus on KAPs and MARPS the gender based violence intervention can still be continued along with the other prevention strategic

	objectives. This may not be extra activity for those in prevention because the NHS is gender inclusive, thus creating the opportunity for this intervention to continue.
5. Ensure that all pregnant women and their partners have access to the full range of prevention of parent to child transmission (PPTCT) interventions through strengthened maternal and child health (MCH) service delivery	**Adjust** **1: Carefully plan the scale up and decentralization of PPTCT services as appropriate to the local HIV epidemic**. HIV testing in ANC is an important part of HIV surveillance and it is feasible that PICT could be scaled up widely and in as many ANC settings as possible without creating a big burden on the health system. It is appropriate for high prevalence provinces to decentralize the PPTCT program and integrate the full range of PPTCT interventions (ART, TB screening and EID/infant treatment) into health facilities where ART is provided. However it is likely not be cost effective to decentralize all components of PPTCT programs to the district level in low and medium prevalence provinces. In low prevalence settings ART/delivery/EID and follow could be provided at provincial centres (or cluster district health centres). **2. Fully integrate family planning services into HIV and PPTCT services in ANC clinics.** Family planning is an essential, cost effective HIV prevention intervention and also has a large impact on reducing infant mortality and maternal mortality. Contraceptive prevalence is low in PNG and family planning is not readily available in either HIV or ANC settings. The efficiency of PNGs PPTCT program would be greatly improved by the integration of FP services into HIV clinics and ANC settings. **3. Ensure that the prevention is adequately incorporated into the continuum of prevention and care (CoP&C).** There is scope to further improve and enhance linkage and coordination of PPTCT and paediatric HIV services with MCH and other HIV clinical services. This would increase access of higher risk female (and male) KAP/MARPs to PPTCT services and reduce LTFU from PPTCT programs.

Priority Area 2: Counselling, testing, treatment, care and support	**MTR recommendations**
6. Significantly increase availability of point-of-care rapid testing, with an emphasis on provider initiated counselling and	**Adjust** **1: Focus on targeting HCT services to those most likely to have HIV infection**.: • Focus on increase testing in STI and TB clinics. This is an **urgent priority** activity for the remaining years of the NHS

testing (PICT), STI and TB services	• Provide mobile HCT using POC testing to KAP/MARPs where they live, work and play (markets, PMV stops, buai stalls and other sites where sex is exchanged) • Scale up PICT in preference to scaling up traditional 'VCT' services – this should make counselling and testing more efficient and able to be provided in busy high volume sites without restriction. • Improve referral links between NGOs/CBOs and other groups providing prevention outreach and working with KAP/MARPs in the community to HCT and care/treatment services through the COPC • Include messages about the important of knowing one's status and accessing early treatment in prevention programming
7. Increased access to adult and paediatric antiretroviral treatment (ART) and opportunistic infection (OI) and tuberculosis (TB) management at the District and local level in high prevalence provinces.	**Adjust:** **6: The extent of LTFU in the HIV care and treatment program needs to urgently be ascertained as it has serious implications for the durability and success of PNGs first line ART regimes.** The use of case managers and NGOs, CBOs, PLHIV peers and volunteers who can assist in supporting PLHIV on ART to stay in care and also track LTFU clients needs consideration. SMS messaging is a relatively low cost intervention that has been used to track clients and remind them of clinic appointments/ARV adherence in many countries in the world and could be considered in PNG. **7. ART data management issues need to be addressed as they have widespread implications (forecasting, budgeting, assessing coverage and need for scale up, monitoring LTFU etc**). The MTR feels strongly that the further scale up of HIV clinical services including ART needs to be driven by improved data collection, management and planning – to carefully target locations where services are needed. The development of packages of core HIV prevention and care and treatment services that can be tailored to local epidemics, geography, infrastructure and access to services would support planners and health managers to undertake this process in a consistent and efficient way. **8: Institutionalize the continuum of prevention and care (CoP&C)** to improve access of MARPs/KAP to clinical services and support retention of care to improve clinical outcomes and maximise opportunities for ARV treatment to be a major prevention of HIV transmission in PNG **9: Expand the decentralization of pediatric ART** (both early treatment and detection/treatment of older children) in high prevalence provinces/districts
ADD Increase access to STI services within the CoP&C	**Add** **1:The management of STIs should be considered a priority activity over the remaining years of the current NHS and included in the Top Ten Interventions.**

	2 . GoPNG/NDoH should urgently consider implementation of the recommendations from the recent PASHIP evaluation. This evaluation recommended that PNG complements its current focus on STI clinical management using the syndromic management approach with a more public health approach focused on detecting and managing asymptomatic STIs among particular population groups and in particular geographic locations. This should include: • Improved detection and management of serious, curable, asymptomatic STIs that can be detected and treated cheaply (in particular, syphilis). • An increased focus on screening and case finding of asymptomatic STIs in certain high priority geographic areas (e.g high STI/HIV burden provinces, economic enclaves; and major population centres such as Port Moresby, Lae, Madang, Goroka, and Mount Hagen). • An increased focus on screening and case finding of asymptomatic STIs in priority populations including female, male and transgender sex workers, MSM, clients of sex wokers, mobile men with money etc • Periodic presumptive treatment of KAP at high risk for repeated STI may also be considered

Priority Area 3: Systems strengthening	
8. Strengthen and expand second generation surveillance systems (biological and behavioural surveys, case reporting and STI surveillance)	**Continue:** 17. **The national SITWG should take an active role in ensuring that progress continues to be made in strengthening the strategic information system**. It should guide the consolidation of the surveillance and M&E efforts of NDoH and NACS to ensure what capacity there is is made best use of, and to prevent duplication of activities and data collection demands placed on service providers. **18. NDoH must renew efforts to rebuild capacity, to allow for the performance of its key surveillance role, to effectively coordinate the HIV surveillance system and to better analyse and interpret surveillance data.** The recruitment of a surveillance coordinator/epidemiologist is essential, and any additional support required to achieve the priority surveillance goals should be identified. **19. For the next two years NDoH should focus on three priorities.** It is not realistic to resume the National Surveillance Plan in its current form**.** During this time the routine surveillance activities of NDoH should focus on: a) the collection of HIV testing data, prioritising data including denominators from ANC sites; b) collection and analysis of HIV case notifications; and c) maintaining the ART monthly reporting database which aims to capture the number of people newly registered pre-ART, those starting treatment, and those who have died or been lost to follow up. **20. Work on data collection forms should continue.** At the time of the MTR the forms used for collecting monthly HIV testing data and ART reporting were in the process of being amened, primarily to better capture data relating to

	PPTCT. This also represents an important opportunity to more comprehensively revise these forms, in consultation with service providers, so that they might better capture data required for routine surveillance purposes. **21. Database security must also be addressed.** The National HIV datasets should be located on a secure server, and protocols for backing up these datasets developed and adhered to. **22. Strengthening ProMESTs should be a priority, as it has the potential to yield substantial benefits for the entire surveillance system**. Providing training and support to increase ProMESTs' capacity to collect, verify and analyse data at the provincial level would improve data quality and completeness at the national level as well as increasing the utility of data at the provincial and facility level. For this to be successful it will be necessary for both NACS and NDoH to actively and jointly participate in this process and provide ongoing support to provincial level staff and stakeholders. **23. A feasible set of behavioural and bio-behavioural surveillance activities need to be programd with priority being given to identifying sentinel surveillance through ongoing, repeatable BSS in high prevalence settings and with key populations exposed to high levels of risk; where appropriate results from existing BSS should be used as baseline data**. It will be necessary to secure funding for BSS activities and to build capacity to conduct this research. Opportunities to gather behavioural data through service provision should also be pursued. When providing outreach services to at-risk populations, behavioural questions can be asked for limited, regular repeated time periods. Clinical services that successfully reach particular key populations are also potential providers of routine data on HIV prevalence and risk behaviours. With the planned IBBS currently suspended, the need and value of investing further in a national general population IBBS should be reassessed. Such an evaluation should consider the significant financial costs (and opportunity costs, particularly in regard to staff time) involved, the requirements for training a large workforce to complete the study, and the probable impact of the survey and its findings.
9. Significantly increase technical assistance and organisational capacity development at the sub-national levels for key organisations and	**24. NACS should engage its Council in a dialogue to interrogate the findings of this MTR, to identify the required new roles and responsibilities for NACS, and to determine a road map and accountability framework for NACS to implement the road over the coming two years.** **25. To better inform this dialogue, NACS should engage NDoH and other service delivery partners in immediate and urgent discussion about how best to move the health sector towards this new model.** **26. Internally, the NHS planning process at the national level will now be irrelevant for the NGOs and should focus on strengthening the PACS to support the stakeholders at the sub-national level.** It is crucial for the PAC and its secretariat (PACS) to liaise with the governors' office, the provincial administrators' office, the DAC, the district administrator's office, the district health officer and the office of the local Member of Parliament to access the PSIP, DSIP and LLGSIP funds. More focus and attention needs to be given to the Provincial Engagement Framework

10. A strengthened and functioning National AIDS Council Secretariat (NACS) and Provincial AIDS Council Secretariats (PACS), with an initial emphasis on PACS in high prevalence provinces	implementation in order to secure sub-national level funding to support HIV programs. NACS must support PACS to facilitate local level planning and budget by using the local level systems example PMT, PCMC, JDP & BPC processes to access the local level funding arrangement. **27. NACS should re-assess and re-design how it coordinates at sub-national level**. Unless very clear terms of references, scope of work and processes for checks and balance for both financial and program reporting and accountability for the UOs are developed by NACS and used by the OUs, the non-functioning OUs should be abolished. Focus should be on establishing similar and more robust systems at the local level. PACS and NACS need to allocate at least one or two people respectively to be responsible for managing the OUs so that they feel attached to the NACS/PACS management and a 'home' where they can get technical and program support to function effectively and efficiently. NACS should continue to work with Igat Hope and BAHA only, and strengthen their capacity especially that of Igat Hope. NACS must work to assist Igat Hope to build the capacities of its sub-national partners especial for those in high prevalence Provinces. 28**. NACS should facilitate strong NGO & Government (NDoH, NACS, PACS, PG) collaboration to encourage better and targeted use of TA, training and other resources to build capacity for NACS, PACS, PG and the NGO partners**. NACS and PACS should work through the Regional Managers and Provincial HIV&AIDS Response Coordinator to assist TA mapping exercise with the Provincial Administrations initially in high prevalence provinces. This exercise will assist the Provincial Management Team to secure funding within their systems for provision of TA as and when needs for specific tasks including capacity development for sub-national implementer of the NHS. NACS, NDoH, development partners and current partner NGOs, FBOs, and CSO work together to establish and scale up a TA mobilisation and partnership system to improve linkages between organisations that need TA and organisations that provide TA, and evaluate and share the learning from existing TA programs at the sub-national level.

Annex 3 List of people interviewed/met

In Port Moresby

Dr Moale Karioko	Deputy Director NACS
Annie McPherson	CD Igat Hope
Don Liriope	Relationship officer Igat Hope
Nick Evera	KAP officer Igat Hope
Rose Kunjip	Advocacy officer Igat Hope
Carol Kamen	Junior trainee Igat Hope
Peter Momo	Member Igat Hope
Jacob Jeffery	Member Igat Hope
Nixon Akvia	Hedru Clinic peer support – member Igat Hope
Linda John	Hedru Clinic peer support – member Igat Hope
Dr Geoff Clarke	Director Health/HIV AusAID
Prudence Borthwick	AusAID First Secretary Health and HIV
Stewart Watson	UNAIDS
Fabian Ndenzako	Team Leader, Communicable Diseases Cluster, WHO
Abraham Opito	HIV Decentralisation Adviser HHISP
Pasco Kase	Secretary Health, GoPNG
Dr Dakulala	Deputy Secretary – Preventive Health Services
Mr Phillip Tapo	Acting Director NACS
Mr Ishmael Robout	NACS Regional Manager - Highlands
Ms Fredah Taimbari	NACS Regional Manager – New Guinea Islands
Ms Angesula Jogamup	NACS Regional Manager – Southern region
Mr Joseph Mage	Human Resources Manager
Mr Moses Kaigu	Policy Planning Manager NACS
Mr Valentine Tangoh	NACS Regional Manager - Momase
Ms Grace Konia	Associate Project Analyst ADB
Gani Ga Gani Ga	Senior Project Officer ADB infrastructure
Ellen Kulumbu	HD operations officer World Bank
Dennis Wendel	Regional Director USAID/Pacific Islands office
Sr Tarsisia	Catholic HIV&AIDS Services Incorporated (CHASI)
Justine McMahon	CHASI Program Manager
Graham Apian	CHASI M&E officer
Margie Etty Norbertus	CHASI PPTCT coordinator
Mr Paul Donovan	Oil Search Health Foundation
Dr Julia Verena Stinshoff	Oil Search Health Foundation HIV Program Coordinator
Jennifer Miller	Tingim Laip Project Manager
Aedan Whyatt	AusAID First Secretary Health and HIV
Daisy Rowaro	AusAID acting/Senior Program Manager NGO Senior Delivery Team
Diane Dagan	AusAID Program Manager Health Workforce
Clement Totavun	AusAID Assistant Program Manager Public Health
Josephine Mill	UNICEF
David McLachlan-Karr	United Nations Residential Representative
Catherine Rua	UNESO
Peterson Magoola	UNDP
Maria Nepel	UNAIDS
Shiv Nair	PNG Country Director FHI 360
Daniel Tesfaye	PNG Deputy Director FHI 360
Willie Porau	CPHL Laboratory Manager
Joseph Kivavia	CPHL Senior Laboratory Technician
Willie Kua	Area Medical Store Badilli – HIV&AIDS/STI
Alex Loaip	Area Medical Store Badilli – HIV&AIDS/STI
Leah Hoffman	PSI
Caroline Bunemiga	General manager Business Coalition Against HIV&AIDS (BAHA)
Eileen Seneve	Operations Coordinator BAHA
Joan Kim	Policy Development BAHA

Chi-Haru Sai'i	Senior Training Officer BAHA
Joe Bukikun	Resource and IT support BAHA
Nellie Backhaus Gelam	Info Line BAHA
Kere Ume	Finance and Admin BAHA
Roselyn Rupra Taim	Logistics and Coordinator BAHA
Stewart Yareki	Logistics and Training Support BAHA
Caroleen Ragunathan	Policy and Training Officer BAHA
Lawrence Ouma	Dept of Finance
Laurance Duguman	Dept of National Planning
Andrea Irvin	HIV Adviser – Dept of Education
Rhoda Yani	Dept of National Planning (HIV Focal Point)
Dr Enkhjin Bavuu	Senior Fund Portfolio Manager, South and East Asia, Global Fund (GF)
Soso Getsadze	Assoc Specialist Procurement &Supply Management South & East Asia, GF
Mehran Hosseini	Technical Officer, Value for Money and Impact Program Effectiveness, GF
Ingline Juvelta	Program Officer, Global Fund
Ahefah Osman	Finance Specialist, Global Fund
Alka Aggaewal Singh	Monitoring Specialist, Global Fund
Wilfred Kaleva	HIV Research Adviser NACS RCU
Tony Lupiwa	HIV Research Consultant NACS RCU
Julie Airi	Research Manager NACS RCU
Lydia Seta	Poro Sapot Program Manager
Albert Alex	Poro Sapot M&E Specalist
Veronica Emicko	Poro Support Projects
Janet Kilei	Poro Support Projects
Ilap Suva	Poro Support Projects
Philip Rupa	Poro Support Projects
Jonathon Wala	Poro Support Projects
John Pukalo	Poro Support Projects
Ian Ako	Poro Support Projects
Morea Sina	Poro Support Projects
Mary Andrew	Friends Frangapani
Anna James	Friends Frangapani
Daera Lahui	Friends Frangapani
Sally Joseph	Friends Frangapani
Matthew Audi	Friends Frangapani
Nick Evera	Kapul Champions
Lydia Seta	Senior Project officer Poro Sapot
Albert Alex	M & E Specialist Poro Sapot
Tau Tovope	PNG Church Alliance on HIV&AIDS
Andrew Hama	PNG Church Alliance on HIV&AIDS
Andrew Tabel	PNG Youth Alliance on HIV&AIDS
Maryanne Nanadai	TL PASCO
Melanie Lou	PACSO
Dr Pankaja Panda	Health Adviser USAID Pacific Islands
Thomas Lisenia	IEA National HIV&AIDS Training Unit (NHATU)
Julienne Gore	IEA (NHATU)
Quina Ongugo	Project Manager Halivim Youth HOPE PNG
Joan Timothy	Country Director HOPE wordwide PNG
Lyne Kunda	Finance officer Halivim Youth HOPE PNG
James Konbukon	Case Manager &Adherence Counsellor Halivim Youth
Doris Ekinye	Case Manager &Adherence Counsellor Halivim Youth
Matali Pupij	STI Nurse
Timothy Tony	STI Nurse (male)
Jane Tropu	VCT Counsellor
Francis Evox	Hygienist
Peter Male	Lab technician

Matthew Putiat	OI/ART Manager
Dr Gideon Nano	Regional STI/HIV MO, Southern Region and MO Heduru Clinic PMGH
Sr Gola Sawiya	STI/HIV Nurse Heduru Clinic PMGH
Health staff	9 Mile clinic
Olga Fontanellaz	Grant Recipient Technical Adviser, Oil Search Health Foundation
Dennis Wendel	Regional Director, USAID/Pacific Islands Office
Dr Pankaja Panda	Health Advisor, USAID Pacific Islands
Paul Donovan	Grant Manager, Oil Search Health Foundation
Margaret Kamo	Nursing Officer 9mile clinic
Israel Naraman	Nursing Officer 9 mile clinic
Dien Wama	Health Extension Officer 9 Mile Clinic
Dr Sib Bieb	NDoH
Dr Nick Dala	NDoH
Dr Peniel Boas	NDoH
Mr Namarola Lote	NDoH
Willie Wari	NDoH
Dr Kitur	NDoH
Paik Tade	NDoH
Patricia Kepui	NACS
Dr Clair Rayan	PNGIMR
Assoc Prof Andrew Valley	PNG IMR
Kevin Miles	Oil Search Health Foundation
Apa Parunga	Oil Search Health Foundation
Joan Robinson	UNAIDS
Mr Speer Tolavata	Anglicare PNG Inc

In Western Highlands and Ziwaka Provinces

Mathew Noki	Medical Social Worker, Mt Hagen Hospital
Apollos Yimbuk	HTO Western Highlands PAC
Moses Laki	Police Rep, Western Highlands PAC
Rev Jacob Bogaperi	HI&AIDS Field Liaison Officer, BUPNG
Ruth Mark	M&E Officer, Western Highlands PAC
Dr Zure Kombati	Chairman, PROMEST, Western Highlands PAC
Joshua Meninga	HRC Western Highlands PAC
Sala Koiya	Tru Prens Women's President
Margaret Joe	Tambul Nebilyer Prens Rep
Julie Arare	Hagen Rural Prens Rep
Serha Ray	Assist Admin Officer (Tru Warriors)
Rebeca Hai	Hagen Urban Prens Rep
Susan Koiya	Coordinator Tru Prens
Dickson Yano	Tru warriors
Paul Wapiya	Tru Warriors
Michael Koimb	Project Officer, Tingim Laip
Serah Chapau	Tingim Laip
Jovessa Saladoka	Prevention Advisor Tingim Laip
Ishmael Robert	Regional Manager Highlands Region
Michael Pagasa	HIV&AIDS Program Director BUPNG
Marriam Dogimab	Associate Director FHI 360
Paul Zulu	Community Health Worker Rabiamul Clinic (ART Prescriber)
Sr. Rose Paul	Nursing Officer, Rabiamul Clinic
Cliff Rombok	Operations Manager, Anglicare -Highlands
Teresita Waki	Susu Mama (Team leader)
	Provincial Administrator
	Deputy Provincial Administrator
John Nia	Provincial Disease Control Officer/CCLLS?
Dr Kiagi	Acting Director- Curative health
Dr Bige	Physician & HIV management

Kuk Gola	Dist Health Promotion Officer/Act HRC Jiwaka
Jenny Walep	DHO/Act Health Program Manager Jiwaka
Tintau Mek	Nursing officer STI Officer CHAI Tininga Clinic
Theresa Mek	Midwife – PPTCT Officer Tininga Clinic
Sr Judy Rank	Nursing officer, Act Sr In Charge STI&HIV Tininga
Gabriel Matisin	Primary Health Director Kudjip Health Centre
Judy David	OIC HIV&STI Kudjip Health Centre
Leah Uruepe	ANC PPTCT, Kudjip Health Centre
Pauline Kaman	STI Nurse Kudjip Health Centre
Kut Kilengau	STI Nurse Kudjip Health Centre
Elizah Ape	HIV&STI Officer Kudjip Health Centre
Sr Regina Wamp	Shalom Care Centre Tinsley Health Centre
Sr Fredirica	Shalom Care Centre Tinsley Health Centre

In Enga Province

M. Rambok	Anglicare Highlands Program Manager
Man Yawai	Naima Palu Association (PLHIV Group)
Pinamai Rakaiparo	GLL PNG HIV&AIDS Desk
Jee Saikali	Wapenmanda Care Centre (Primary Health Care)
John Kipakop	Out of School Youth
Jennifer John	Waps 4 Square (Re John Sirgi)
Anna Mana	Naima Palu Association (PLHIV Group)
Sandy George	Naima Palu Association (PLHIV Gropu)
Anna Sapende	Naima Palu Association (PLHIV Group)
Martha Rex	Naima Palu Association (PLHIV Group)
Anton Kuipingi	Naima Palu Association (PLHIV Group)
Sherha Amos	Naima Palu Association (PLHIV Group)
Betty Yukum	Naima Palu Association (PLHIV Group)
Bess Sandy	Naima Palu Association (PLHIV Group)
Aken Lengo	Kandep CKDC
Berth Elias	Community development
Lazarus Pitu	Wapenamanda Catholic Church
Benson Hamabu	Enga Teachers'College
James Wai	Enga University Centre
Mathew Leman	Anglicare Wabag
Joseph Lyuke	Anglicare Wabang
Peter Pumbu	Wabag Community
Epia Kaka	Wabag Community
Rex Anguel	Wabag Community
George Namao	Wabag Community
Bill Alo	Wabag Community
Steven Andrew	Wabag Community
John Timothy	Wabag Community
Judy Kunge	Wabag Community
Margea Kipongo	Wabag Community
Jackson Ounao	Kompiam
Leo Aen	Sopas Hospital
Aaron Luai	Director Enga Health Services
Dr Mean Samso	Enga Provincial Administrator
Joanes Kindel	Health Planner Enga
Cathy Kembe	M&E Enga PAC
Ben Nema	HRC Enga

In Autonomous Region of Bougainville and East New Britain Province

Autonomous Region of Bougainville	
Michael Pau	Catholic health Centre Hahela, Buka (ARB)
Sr Stella Morokana	Catholic Health Centre Hahela, Buka (ARB)
Ray Himata	HRC – ARB PACS PACS Office, BUKA
Mary Matanu	HTO ARB PACS PACS Office, Buka
Steven Pokohi	M&E Officer – ARB ARB Administration
Dr Anthony Pumpara	Health Division ARB Administration
Chris Siriosi	Deputy Administrator ARB Administration
Alexia Sael	HEO- Wakunai Health Centre Wakunai District
East New Britain Province	
Levi Ma	Deputy Administrator
Elpin Samson	HRC East New Britain
Steven Auri	HTO – ENB PAC
Beverly Akuila	HRC ENB PAC
Enos Libung	M&E ENB PAC
Peter Nangu	PLHIV Rep ENB Ambassadors
Dr Esther Gabut	Regional Medical Officer - NGI
Sr Wendy Ulnas	Counsellor – Peter Torot Clinic
Sr Siwa Clement	SIC – Peter Torot Clinic
Steven Kilalang	HIV Coordinator – ENB Red Cross
Sr Susan Gevia	Diocesan HIV Coordinator
Rev Amos F	ENB Churches Rep
Mary Ponahai	Principal Vunapope School of Nursing
Mary Akis	Lecturer – Vunapope School of Nursing
Sylvenus Akis	OIC Tapipipi Health Centre
Joe K	VCT Counselor
Sr Hilda Bavai	SIC Karavet Dist Health Centre
Rita	Volunteer
Joshua Wowo	Rabaul Dist Health Coordinator
Maraken Uvano	A/District Administrator ENB
Sr Irima Goigoi	Nursing Sister Tapipipi Health Centre
Joe Ngalu	HEO-OIC Karavet District Hospital

Participants tnvited to the Validation Workshop, Port Moresby, 8-9 May

Name & designation		Organisation
Peter Godwin	Team Leader	MTR
Dr. Ninkama Moiya	Policy & Planning Expert	HHISP
Rachel Burdon	Clinical Specialist	MTR
Angela Mandie-Filer	Gender and Capacity Building Expert	MTR
Dr. John Millan	Clinical Specialist	MTR
Prudence Borthwick	1st Secretary	Health & HIV – AusAID
Daisy Raworo	Senior Program Manager	Health & HIV - AusAID
Dr. Fabian Ndenzako	Team Leader, Communicable Diseases Cluster	WHO
Mr. Staurt Watson	UNAIDS Country Coordinator	UNAIDS
Dr. Moale Kariko	Deputy Director	NACS
Mr. Abraham Opito	HIV Advisor - Decentralisation to NACS	HHISP - AusAID
Mr. Peter Bire	Director	NACS
Mr. Danny Beiyo	Manager Inter, Cross Cutting	NACS
Mr. Sil Bolkin	Senior Policy Coordinator	NACS
Ishmael Robert	Regional Manager - Highlands	NACS

Valentine Tangoh	Regional Manager - Momase	NACS
Angesula Jogamup	Regional Manager - Southern	NACS
Patricia Martha Somu	Grants Coordinator/MTR Focal Person	NACS
Dr. Banare Bun	Chairman	NAC
Mr. Dick Avi	NAC Member - PACSO	NAC
Christine Dee	NAC Members - PLHIV Rep.	NAC
Mr. Philip Tapo	Deputy Director -Prevention	NACS
Mr. Sil Bolkin	Senior Policy Coordinator	NACS
Mrs. Ruth Beriso	Gender Officer	NACS
Mrs. Agnes Gege	Surveillance Officer	NACS
Mr. Kinjohn Lui	IT Manager	NACS
Mr. Danny Beiyo	Manager - M&E	NACS
Margret Munjin	Marketing Unit Manager	NACS
Marcel Burro	M&E Officer	NACS
Ms. Julie Airi	Manager - Research	NACS
Dr. Wilfred Kaleva	Consultant - Research	NACS
Veronica Semof	Research & Information Officer	NACS
Patricia Kepui	M&E Officer	NACS
Joe Mage	Manager - Human Resource	NACS
Michael Aglua	Manager - Corporate Services	NACS
Stella Auali	EO - Director Officer	NACS
National Stakeholders		
Heni Meke	Director	Anglicare
Matella Urakowi	Branch Manager	Anglicare
Lily Lesley	DDTO	Anglicare
Speer Tolavata	M&E	Anglicare
Dulcie Mavsen	Program Officer	FHI 360
Daniel Tesfaye	Deputy Director	FHI 360
Daera Lahui	Project Coordinator	Friends Frangipani
M.J Graham	Project Manager	Tingim Laip
Janet Kilei	Area Coordinator	Save The Children (PSP)
Jonathan Wala	Area Coordinator (Male)	Save The Children (PSP)
Mr. Sanjay Singh	Senior HIV Program Manager	VSO
Ian Lapu	Health Education Officer - HIV Positive Living Project	World Vision
Bianke Gibilent	Nurse Counsellor - HIV Positive Living Project	World Vision
Ms. Quina Ongugo	a/Project Manager	HBYP - Hope Worldwide
Eileen Tugum	Deputy Country Representative	PSI
Fikre Estifanos	Program Director	PSI
Mr. Tom Ellum	Country Director	Marie Stopes
Apa Parunga	M&E Coordinator	Oil Search Health Foundation
Ross Hutton	Manager	Oil Search Health Foundation

Annie McPherson	Executive Director	Igat Hope
Eileen Seneve	Operation Coordinator	BAHA
Roslyn Taim	Condom Coordinator	BAHA
Andrew Abel	Coordinator	PNG YAHA
Peter Dama	Communication Officer	PNG YAHA
Dr. Paison Dakulala	Deputy Secretary	NDoH
Dr. Nick Dala	HIV/STI Program Manager	NDoH
Eddie Sarufa	Gender & HIV Director	NDoE
Irvin Andrea	HIV&AIDS Advisor Education	NDoE
Lorraine Manua	HIV&AIDS Coordinator	Ombudsman Com
Nancy Warkia	Policy and Planning Officer	Ombudsman Com
Jyotiee Mehera	HIV Prevention Advisor	HHISP - JTAI
Joanne Robinson	Leadership & Advocacy Adviser	UNAIDS
Bradly Mathers	Consultant	UNSW
John Kaldor	Consultant	UNSW
Pankaja Panda, PhD, MPH	Health Advisor	USAID/Pacific Island
From the Provinces		
Joshua Meninga	HRC	WHP PAC
Ben Nema	HRC	Enga PAC
Henry Happen	HRC	SHP PAC
Simon Pekon	HTO	EHP PAC
Conrad Wadunah	HRC	Madang PAC
Joan Ganoka	HRC	Morobe PAC
Beverly Aquila	HRC	ENB PAC
Ray Himata	HRC	ARB PAC
Umulin Paul	HRC	Gulf PAC
Isu Aluvula	HRC	NCD PAC
Gabriel Aglua	M&E Officer	NCD PAC
Gairo Kapana	a/HRC	Central PAC
Provincial Health Advisors		
Ms. Margret Kaile	Provincial Health Advisor	Simbu Prov. Health Div.
Mr. Philip Talpa	Director - Provincial Health	WHProv. Health Authority

Mr. John Masili	PHIO - Health	Enga Prov. Health Div.
Mr. Michael Mombu	Director- Rural Health	SHProv. Health Div.
Mr. Micah Yawing	Provincial Health Advisor	Morobe Prov. Health Div.
Dr. Anthony Pumpara	CEO - Division of Health	ARB Health
Provincial Representatives Self Funded		
Mr. Marcus Kachau	Director - Public Health	Madang Prov.Health Div.
Nicholas Hamny	Ass/Director Planning	Madang Provincial Admin.
Mr. Moses Sariki	Director Education	Mad Pro Admin.
Joshua Wowo	Rabaul District Health Coordinator	ENB Prov. Admin.
Regional Medical Officers		
Dr. Patronia Kaima	Highlands Regional HIV/AIDS Coordinator	Tiniga Clinic
Dr. Esther Gabut	NGI Regional STI/HIV Medical Officer	ENB Provincial Health
Provincial Stakeholder		
Father Paul Lokunume	HIV&AIDS Diocesan Sec.	Kikori Archdiocese
Maria Koke	Catholic Health Secretary	SHP Catholic Diocese
Michael Pagasa	HIV&AIDS Program Manager	BUPNG
Miriam Layton	Co - Director	AT Projects

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Annex 5 High Impact Priorities

The MTR was also asked to develop a short list of recommended focus areas with a limited number of high impact activities and targets achievable within existing resources and available capacity of GoPNG and NGO partners to help PNG achieve MDG 6 by 2015.

Based on the recommendations of the MTR, eight (8) high impact, priority interventions have been identified. These are listed below. These are the interventions that the MTR consider it most important that NHS implementation focuses on if the targets set are to be reached, and the goals of the NHS achieved in the coming three years.

1. **Comprehensive programmes for identified MARPs in high prevalence settings based on the National Strategy for Comprehensive Condom Programming (CCP) and the Continuum of Prevention and Care are developed and scaled up**. Such programmes are likely to be the most cost-effective way on reducing new infections as they will be targeted where most new infections are occurring. Existing prevention and care service providers should focus, expand and implement programmes for MAPRs that include:
    - Targeted on the basis of mapping of types of MARPs by risk behaviours and location of risk behaviours
    - Identify appropriate messages and communication strategies to reach targeted populations and situations
    - Use appropriate condom promotion and distribution means to ensure consistent condom use in high risk sex
    - Appropriate access to user-friendly HTC, STI, SRH, sexual violence, and treatment and care services.

These programmes should be coordinated at national, provincial and local levels by Continuum of Prevention and Care Coordination Committees at the various levels.

2. **The National Strategy for Comprehensive Condom Programming (CCP) is finalised and implemented** to focus, sharpen, strengthen and track condom promotion and use across the whole range of risk situations in the country: high risk, more at risk, and general population. This can achieve three outputs: i) effective harm reduction in multi-partner sex through consistent condom use, lowering HIV transmission risk significantly, ii) continued general population awareness of and access to condoms as a fundamental and cost-effective HIV prevention strategy, and iii) integration of HIV in wider sexual and reproductive health programmes. Implementing condom promotion and distribution within such a comprehensive framework will ensure the maximum impact is achieved for condom use. The National CCP Committee should oversee implementation of the strategy.

3. Five more family support centres are established in high and medium prevalence areas. NACS and NDoH can work with FSVAC to map and review existing sexual violence services and strengthen the linkages between medical care and treatment, counseling and support and law and justice to ensure that GBV is included within the CoPC. Careful consideration must be given to how the needs and access of MARPs is included in the extension of these services.

4. The Continuum of Prevention to Care model of service delivery is institutionalized in PNG to strengthen links between PLHIV and KAP/MARPs in the community, prevention interventions and clinical services. This will improve access of KAP/MARPS to HCT, PPTCT, STI and care/treatment services, reduce loss to follow up and improve efficiency of service provision (for example by ensuring systems are in place for PITC for all TB and STI clients and strengthening TB-HIV co-infection management). This will include:

- **Improving HIV service delivery data collection and monitoring systems to have the information to assess coverage and gaps in service delivery, plan for the efficient and targeted scale up of services, monitor LFTU and forecast drug/commodity needs**.

- **Developing packages of core HIV prevention and care and treatment services** tailored to local epidemics, geography, resources and infrastructure to support planners and health managers provide and scale up service delivery in a consistent and efficient way.

- **Addressing LTFU in the HIV care and treatment program** through the use of case managers and NGOs, CBOs, PLHIV peers and volunteers who can assist in supporting PLHIV on ART to stay in care and also track LTFU clients

- **Focussing counselling and testing on those most likely to have HIV infection**. Improved targeting of HCT services should include: i) increased testing in STI and TB clinics; ii) mobile HCT using POC testing to KAP/MARPs where they live, work and play; iii) Scaling up PICT in preference to scaling up traditional 'VCT' services; iv) improving referral links between NGOs/CBOs and other groups providing prevention outreach and working with KAP/MARPs in the community to HCT and care/treatment services; v) including messages about the important of knowing one's status and accessing early treatment in prevention programming.

- **Thoughtful scaling up the PPTCT program keeping in mind the cost effectiveness of this intervention in low prevalence provinces**. HIV testing in ANC is an important part of HIV surveillance and it is feasible that PICT can be scaled up widely and in as many ANC settings as possible without creating a big burden on the health system. It is appropriate for high prevalence provinces to decentralize the PPTCT program and integrate the full range of PPTCT interventions into health facilities where ART is provided. However it is likely not be cost effective to decentralize all components of PPTCT programs to the district level in low and medium prevalence provinces. In low prevalence settings ART/delivery/EID and follow could be provided at provincial centres (or cluster district health centres).

- **Integration of family planning services into the HIV, the STI and PPTCT program in ANC clinics.** Family planning is a critical and cost effective HIV prevention and care intervention that needs to be integrated into all HIV, STI and PPTCT services. n Catholic health services where FP services are not provided– a strong, well supported referral mechanism through a strengthened CoPC will be critical in ensuring women who access Catholic health services have access to family planning.

5. The management of STIs receives increased priority in the CoPC and the syndromic management approached is expanded to focuson detecting and managing

asymptomatic STIs among particular MARPs/KAP and in particular geographic locations. This would involve:

- Improved detection and management of serious, curable, asymptomatic STIs that can be detected and treated cheaply (in particular, syphilis).
- An increased focus on screening and case finding of asymptomatic STIs in certain high priority geographic areas (e.g high STI/HIV burden provinces, economic enclaves; and major population centres such as Port Moresby, Lae, Madang, Goroka, and Mount Hagen).
- An increased focus on screening and case finding of asymptomatic STIs in priority populations including female, male and transgender sex workers, MSM, clients of sex wokers, mobile men with money etc
- Periodic presumptive treatment of KAP at high risk for repeated STI may also be considered
- Careful consideration of stand- alone versus integrated STI services in certain geographic locations.

6. A prioritised national Strategic Information (SI) system is put in place and implemented. This is essential if a correct picture of the epidemic in PNG is to be established, and if progress in implementing programmes is to be identified. This system should be pro-actively coordinated by the national SITWG to ensure that progress continues to be made in strengthening the strategic information system; it should guide the consolidation of the surveillance and M&E efforts of NDoH and NACS to ensure that the NHS can be reported against accurately and in a timely manner. The SI system should include:

- **Immediate efforts by NDoH to rebuild capacity, to allow for the performance of its key surveillance role, to effectively coordinate the HIV surveillance system and to better analyse and interpret surveillance data.**
- **Focus on three priorities:** a) the collection of HIV testing data, prioritising data including denominators from ANC sites; b) collection and analysis of HIV case notifications; and c) maintaining the ART monthly reporting database which aims to capture the number of people newly registered pre-ART, those starting treatment, and those who have died or been lost to follow up.
- **Strengthening of ProMESTs**. Training and support should be provided to increase ProMESTs' capacity to collect, verify and analyse data at the provincial level; this will improve data quality and completeness at the national level as well as increasing the utility of data at the provincial and facility level. For this to be successful it will be necessary for both NACS and NDoH to actively and jointly participate in this process and provide ongoing support to provincial level staff and stakeholders.
- **Continue to work on data collection forms.** At the time of the MTR the forms used for collecting monthly HIV testing data and ART reporting were in the process of being amened, primarily to better capture data relating to PPTCT. This also represents an important opportunity to more comprehensively revise these forms, in consultation with service providers, so that they might better capture data required for routine surveillance purposes.

- **Ensure database security.** The National HIV datasets should be located on a secure server, and protocols for backing up these datasets developed and adhered to.
- **A Programme of behavioural and bio-behavioural surveillance with priority being given to identifying sentinel surveillance through ongoing, repeatable BSS in high prevalence settings and with key populations exposed to high levels of risk.** Capacity to conduct this research must be built. Opportunities to gather behavioural data through service provision should also be pursued. With the planned IBBS currently suspended, the need and value of investing further in a national general population IBBS should be reassessed. Such an evaluation should consider the significant financial costs (and opportunity costs, particularly in regard to staff time) involved, the requirements for training a large workforce to complete the study, and the probable impact of the survey and its findings
- **Annual reports against the NHS and the 39 National Indicators.**

7. NACS coordinates and facilitate the implementation of the NHS, based on a road map that aims to achieve a sustainable, integrated HIV programme within the health sector. Such a road map should be developed with the full engagement of the Council, NDoH and other service delivery and development partners about how best to move the health sector towards this new model. The required new roles and responsibilities for NACS, and for NDoH, both at national and decentralised level must be identified; and an accountability framework for NACS to implement the road-map over the coming two years put in place by the Council.

8. NACS develops and builds capacity for PACS to coordinate at sub-national level, focusing on strengthening the PACS to support the stakeholders at the sub-national level within high prevalence provinces. Three steps are required:

- NACS and partners need to determine differing 'packages' of prevention and care services, based on the CoPC, appropriate to differing levels of prevalence in provinces – with priority for high prevalence provinces.
- NACS needs to establish the requirements, capacities and processes (ef PEF) needed for the PAC and its secretariat (PACS) to liaise with the governors' office, the provincial administrators' office, the DAC, the district administrator's office, the district health officer and the office of the local Member of Parliament to access the PSIP, DSIP and LLGSIP funds as appropriate for the appropriate provincial 'package'.
- Clear terms of references, scope of work and processes for checks and balance for both financial and program reporting and accountability for the UOs will need to be developed so that they can play their role at provincial level.

The MTR considers that there are insufficient data available at present to make an 'impact study' of the various interventions of the NHS useful at present. If, however, the 8 high impact interventions describes above were put in place, and baselines and targets set, it is likely that such a study could be conducted towards the end of the NHS period, as a basis for developing a new Strategy. The critical priority step would be intervention 6 – developing and implementing a strategic information system. With this in place, and to coherence of strategy envisaged by the recommendations concerning

the Comprehensive Condom Programming Strategy, the Continuum of Prevention and Care, the focus on MARPs in high prevalence provinces, and the decentralisation of planning and funding, an impact study would, the MTR is confident, show very significant progress and impact within the next two and half years, and largely within existing resources – or at least resources continuing at current levels.