DESIGN DOCUMENT

Program for Health & HIV Research Capacity Development in Papua New Guinea

Final Draft, December 2012

Contents

Acronyms

AusAID	Australian Agency for International Development
COHRED	Council on Health Research for Development
GoPNG	Government of Papua New Guinea
HHISP	Health & HIV Implementing Service Provider
HIV	Human immunodeficiency virus
HRU	Health Research Unit (in the NDOH)
HSPC	Health Sector Partnership Committee
ICRAS	Internal Competitive Research Award Scheme
M&E	Monitoring and Evaluation
MRAC	Medical Research Advisory Committee
MTDP	Medium Term Development Plan
NACS	National Aids Council Secretariat
NARI	PNG National Agricultural Research Institute
NDOH	National Department of Health
NHHRA	National Health & HIV Research Agenda
NRI	PNG National Research Institute
PHHRC	Program for Health & HIV Research Capacity Development
PNG	Papua New Guinea
PNGHRC	Papua New Guinea Health Research Council
PNG IMR	Papua New Guinea Institute of Medical Research
RQO	Research Quality Officer
SMAHS	(UPNG) School of Medicine and Health Sciences
TA	Technical Assistance
TAPREC	Taurama Postgraduate Studies and Research Centre
UPNG	University of Papua New Guinea

Executive Summary

This design document for the Program for Health & HIV Research Capacity Development in PNG (PHHRC) follows a design mission on 18-22 June and 30-31 July 2012. It draws upon the insight of stakeholders consulted and recent evaluations and studies. The proposed Program of AUD22.5m over five years builds upon a long history of AusAID support to the Papua New Guinea Institute of Medical Research (PNG IMR), noting that:

- PNG IMR has experienced significant growth in recent times;
- The Government of PNG and civil society increasingly value (and fund) health research;
- Some recent models of research support have been demonstrated for HIV; and
- AusAID is now integrating its support to Health & HIV in PNG.

PHHRC's purpose is to *"increase the quality, quantity and usage of health and HIV research on the policy and practice changes needed for a better functioning health system in PNG".* PHHRC will invest in a stronger national health and HIV research system, building both demand for and supply of health research, emphasizing that which addresses the known constraints to health service delivery in PNG. PNG IMR will play a significant role as a 'hub'. Key PHHRC principles are to:

- Address important blockages in the areas of
  - **PROCESSES:** Support to strengthen health and HIV research processes and structures
  - **PEOPLE:** Support to strengthen health and HIV research human resource capacity
  - **PROJECTS:** Support for key studies and operational research;
- Support existing successes: PNG IMR's use of budget support to grow a sustainable program, and National Aids Council Secretariat (NACS) model for research direction and management;
- Aim for several linked pathways to change, but avoid having one single pathway;
- Seek to influence health care *practice* at subnational levels, as well as health *policy;* and
- Work for quality improvement within research currently embedded in training programs.

PHHRC will do this through four linked components:

1. **Component one** supports development of a National Health and HIV Research Agenda and the Health Research Unit (HRU) in the National Department of Health (NDOH) (30% of program), supporting an expanded national body for oversight of research activities, research demand creation, and knowledge translation for improved health policy and practice.
2. **Component two** supports PNG IMR and partners (40% of program) including targeted budget support to PNG IMR and support for cross-institutional Research Quality Officers.
3. **Component three** comprises a pool of technical assistance to support the implementation of components one and two (25% of program expenditure).
4. **Component four** covers monitoring and evaluation (5% of program expenditure).

Major outputs of the Program will be:

- A National Health & HIV Research Agenda (NHHRA);
- A clearinghouse for PNG-relevant health and HIV research;
- A Health Research Unit in the NDOH and an expanded national oversight body;
- Several small and large grants programs, with clear conditions promoting:
  - Capacity building partnerships between institutions, which may include subnational health service providers,
  - Alignment with national health and HIV priorities, and
  - 'Pre-doctoral' research support.
- Research Quality Officers for improved research during clinical and public health training;
- Targeted budget support to PNGIMR.

Monitoring and evaluation will assess the degree to which research addresses national priorities and contributes to improved health system function, as well as the effectiveness of this form of aid.

1. Introduction

This design for a proposed five-year Program for Health & HIV Research Capacity Development (PHHRC) has been developed following a design mission to PNG on 18-22 June and 30-31 July 2012, which incorporated interviews with stakeholders, preparation of an exposure draft, and modification following stakeholder feedback and independent quality appraisal. The aide memoire resulting from the first design mission visit and a register of stakeholders consulted are annexed. Finalisation of this design rests with the National Department of Health (NDOH), National AIDS Council Secretariat (NACS) and AusAID.

This document draws on recent relevant evaluations and designs, the detail of which should inform the implementation of this design (especially the work of technical advisors), most notably:

- The Thematic Evaluation of AusAID Support to PNG Research Institutions, by John Fargher and Winnie Kiap completed in January 2011;
- The Draft Independent Progress Report documenting Research Support to the PNG Institute of Medical Research, produced in July 2010 by John Fargher, Winnie Kiap and Teatulohi Matainaho;
- The PNG Universities Review, completed in 2010 by Professor Ross Garnaut and Sir Rabbie Namaliu for Prime Ministers Somare and Rudd;
- PNG IMR HR Workforce Plan Design, Final Report, 8 March 2008, by Alison Heywood, Robert Turare and Evelyn King; and
- Australia-PNG development planning documents, especially descriptions of health system constraints found in the Australia-Papua New Guinea Health Delivery Strategy 2011 – 2015, the PNG Health System Capacity Development Program: Design and Implementation Framework and the PNG-Australia HIV&AIDS Program Description and Implementation Arrangements 2012 – 2015.

2. Program Context

Australia has provided support to the PNG Institute of Medical Research (PNG IMR) since 1995. A one-year extension to Phase 2 of the Institute of Medical Research Core Support Program 2007-2011 will complete in December 2012. Four aspects of the context mean this is a good time to revise the nature of support to health and HIV research, described below.

1. PNG IMR has experienced significant growth

PNG IMR is a considerably different institution than when the previous program of support was agreed. Staffing numbers alone have doubled in the past four years[1]. A recent high-profile review singled out PNG IMR as a 'high quality research organisation' with expert staff producing significant research[2]. A recent thematic evaluation of AusAID support to PNG research institutions considered the scientific activity at PNG IMR to be 'world class'[3]. PNG IMR has been found to be increasingly sustainable[4]. This is partly due to the effectiveness of AusAID support over the past decade[5]. In particular, PNG IMR has leveraged core funding provided by AusAID to successfully compete for international research grants. As a result, AusAID's relative contribution to PNG IMR's expanding budget has declined over the past five years[6].

[1] Brief from PNG IMR Corporate Affairs and Support Services Division, June 2012; PNG IMR HR Workforce Plan Design, Final Report, 8 March 2008.

[2] PNG Universities Review, p.22

[3] Thematic Evaluation of AusAID Support to PNG Research Institutions: Thematic Evaluation Report, p. iv

[4] ibid, p. 25

[5] ibid, p. iv

[6] Research support to the PNG Institute of Medical Research: Draft Independent Progress Report, p.vi

2. The GoPNG increasingly values research

The Government of PNG (GoPNG) has acknowledged that investment in research will be a "major determinant of PNG's future[7]" In the long run the GoPNG aspires to direct 5% public investment into research and development. This commitment to fund research has been demonstrated by the increases in recurrent funding being directed to the PNG IMR in recent times, as well as to the National Research Institute (NRI) and the National Agricultural Research Institute (NARI)[8]. The proposal by PNG Universities through Office of Higher Education (OHE) to set up a National Research Council further demonstrates this increasing awareness and commitment to research. National planning, development and health policies all incorporate expectations that they will be informed by research, even where specific guidance is weak (expanded in Annex three).

3. Some functional models of research support have been demonstrated

Support to develop the Research Unit in the National Aids Council Secretariat (NACS) through the PNG-Australian HIV and AIDS Program (earlier known as 'Sanap Wantaim') has had a range of outcomes. The establishment of a National Research Agenda for HIV and AIDS[9] (due for revision in 2013) and its subsequent use in guiding large and small research grants programs provides a model for national strategic direction of research that can be applied more broadly. Detailed operational lessons can also be found in the NACS processes established for objective review of grant applications, assessment of ethics and quality, and minimization of conflict of interest in awards.

The National Agriculture Research Institute (NARI)'s approach to translation of research is instructive. Once research findings are established, further dissemination is through implementation trials in a variety of settings, through agriculture development extension agencies. This models a form of well-measured implementation trials that could be applied in the health sector.

4. There is a new phase of AusAID support to Health and HIV programs in PNG

AusAID support for health and HIV research in PNG – with the exception of scholarships and Australian Leadership Awards - has tended to be institution-specific. For example, AusAID provides direct support to the University of PNG School of Medical and Health Sciences (SMAHS) [10], as well as IMR and NACS as noted above. Recent changes to AusAID's approach, however, provide an opportunity to consider an integrated program of support to strengthen health and HIV research across PNG.

Firstly, AusAID has begun to implement the Australia-PNG Health Delivery Strategy 2011-2015[11] that now integrates the support to health system and HIV responses that was previously delivered via two separate Programs[12].This is enabled by the appointment of a Program Director who oversees both health and HIV, and the establishment of the Health & HIV Implementing Service Provider (HHISP), which supports initiatives across both health and HIV. Secondly, AusAID has reoriented its operating model to increase support to operational research in health and HIV[13], especially research that has the potential to generate immediate gains in service delivery. Finally, the approaching completion of the current phase of AusAID support to the NACS research unit[14] represents a natural starting point to commence delivery of a more integrated program of AusAID support to health and HIV research.

---

[7] PNG Medium Term Development Plan 2011-2015, p.56. See also Vision 2050, p. 52

[8] Thematic Evaluation of AusAID Support to PNG Research Institutions: Thematic Evaluation Report, p. v

[9] The National Research Agenda for HIV and AIDS in Papua New Guinea 2008-2013

[10] A design mission to consider future support to the UPNG SMAHS is planned to commence shortly.

[11] Especially work within the PNG Health System Capacity Development Program: Design and Implementation Framework

[12] The Capacity Building Service Centre and the PNG-Australia HIV and AIDS Program

[13] Australia-PNG Health Delivery Strategy 2011–2015, p.10

[14] Current support to the NACS Research Coordination Unit concludes in December 2012

3. Strategic Analysis

3.1 Gaps in National health and HIV research leadership and knowledge translation

While health *development* policies have a solid foundation in PNG, policies and priorities around health *research* (with the exception of HIV) are weaker. There is, however, a clear location for research to sit in relevant national and development partner policies, all of which recognize the importance of research to national development. Annex three details the place of research in current health and development policies in PNG.

All stakeholders consulted recognized the need for stronger national leadership of health and HIV research. While PNG IMR has grown in stature as a research provider, there is a serious gap in the area of 'knowledge translation': promoting review and uptake of research findings, or commissioning operational research. There are currently no national institutions that could be clearly identified as having the strong dual connection *both* with research practice *and* with PNG's most pressing health policy or practice questions to do this. This function is currently not sufficiently active within the NDOH, and there is no national reference organization within or alongside NDOH to play this role (one filed in other countries by institutes of health policy or similar). There are few forums where research results are disseminated (such as the national medical symposium) which also actively engage policy-makers or senior health managers.

There is currently no fully functional national body – integrated with NDOH but including other major research stakeholders – that provides overall review and leadership of health and HIV research activities within the country, including oversight of ethical reviews. A PNG Health Research Council (PNG HRC) has recently been proposed, to take the place of the Medical Research Advisory Committee, but the nature and governance of this is not settled. This is a key aspect of a new government-led process to develop a National Health Research Policy that began in 2010, was released in September 2012. This initiative has been spurred by internal assessments that the Medical Research Advisory Committee has insufficient committed membership and has not been providing timely review, as well as the acknowledgement that neither NDOH nor other national bodies have been able to effectively consolidate and manage the breadth of health research currently being conducted in PNG. For HIV research, such functions are currently carried within NACS and performing satisfactorily, though with significant external financial and technical support and in a fashion that is not well integrated with other parts of the health sector.

There is a strong, shared commitment to the potential contribution of health and HIV research for PNG and willingness to develop a National Health and HIV Research Agenda that could play a similar role to that which has successfully guided NACS strong commitment to research into HIV. This is also supported by specific mention within the government's new National Health Research Policy. However due to the gaps noted above, significant support will be required for NDOH and other national research stakeholders to effectively undertake this process. One example is that, beyond the National Health Plan consultations, there is no current nationally representative collation of evidence on burden of disease or emerging health threats sufficient on which to immediately base a research agenda. Major research stakeholders can all identify important topics, but the work to prioritize among these has not yet been done by national stakeholders.

Gaps in 'knowledge translation' also mean that research has not played a major role in helping to understand or test health system changes necessary to improved population health[15]. By this we mean that there is a particular gap in the engagement of policy-makers and civil society in creating

[15] Although important local research on disease epidemiology, treatment and control measures has been produced by PNG IMR, senior medical practitioners and senior scientists at UPNG.

demand for research to address the known constraints on health system function. While the NDOH has a Health Research Unit, and research findings do inform the National Health Plan and the work of specific disease control policies, there are insufficient staff and systems who can transform broader understanding of health system constraints (see below) into questions that researchers can attack. There are few individuals, and no institutions, working at the national level with established capacity to 'broker' research findings into changes to policy or practice, or to the generation of further health system research questions. At the subnational level, among those who deliver health care, there is also very limited engagement in research projects on the part of important health service providers, including provincial and district health agencies, church health services, non-government organisations and the private sector.

3.2 Additional work needed to identify national research priorities

Various analyses (including those noted in the introduction) have identified the range of disease threats to PNG communities and some collation of these informed the National Health Plan development in 2009. Changing epidemiology, including the increase in chronic non-communicable diseases and injuries, and changes in individual diseases, such as the emergence of drug resistant strains of tuberculosis or malaria, demand regular review. In addition, there has been no recent comprehensive scientific assessment of different disease burdens and the costs and impact of prevention or treatment programs, to rank their relative importance for population health and health system requirements.

Cultural, political, and other social influences on health policy and practice are, as in many countries, just as important as data on diseases and interventions. There is currently a lack of agencies with capacity or interest in documenting these – although the National Research Institute and the Institute of National Affairs can provide capacity in these areas that could be applied to health issues. Recent strategic discussions between Australia and PNG have documented key health system constraints[16] as including:

- Critical barriers to service delivery such as:
  - Physical barriers to access and delivery of health services
  - Health funds are not reaching front-line facilities
  - Stock-outs of medical supplies
  - Deteriorating infrastructure and inadequate staff conditions/housing
  - Too few health workers and many approaching retirement
  - Lack of clarity on roles and responsibilities; and
  - Communities fail to utilise health services
- Larger issues in leadership and governance, such as:
  - Political determinants of access to finances and resources at all levels that relate to PNG's unique political system;
  - Difficulties in intergovernmental coordination within the health sector and across decentralized levels of government
  - Inefficiencies and corruption in public administration
  - The potential of recent reforms such as Provincial Health Authorities
- Social determinants of poor health outcomes, such as:
  - Underlying drivers of particular disease (such as gender inequity or economic disadvantage)
  - Educational, social, cultural and linguistic barriers to communities' health care seeking or their engagement with health care services
  - A lack of knowledge of health or general hygiene practices amongst the general population.

[16] Australia-PNG Health Service Delivery Strategy, page 4,5

These issues of health system performance, or the political economy and social environment in which it operates, have rarely been subject to rigorous research. Such topics, in addition to a comprehensive structured approach to comparative disease burden and intervention mapping, need to be considered when setting a new health research agenda for the country.

3.3 Insufficient research-capable institutions and researchers

Growth at PNG IMR, and success in attracting increased international research grants, has been attributed to core funding support received from AusAID over the previous decade[17]. This growth means PNG IMR is increasingly able to "contribute more to national analysis and learning[18]" and has potential to act as a 'hub' institution, playing a more deliberate role in developing PNG's health and HIV research capacity. The establishment of a new research unit at PNG IMR – Population and Demographic Surveillance - reflects the institute's increasing focus on health systems-oriented research.

Research projects are currently determined by the priorities of international research grant funding agencies, the effective NACS-led National Research Agenda for HIV and AIDS, follow-up of longstanding research programs (especially at PNG IMR), and the direction of individual senior researchers. There are few research grant programs driven by a strong comprehensive analysis of national health needs, outside of HIV, that create opportunity or incentives for researchers to address many core health system failings. The PNG IMR has recently implemented an Internal Competitive Research Awards Scheme (ICRAS), funded by the GoPNG, that begins this process.

Significant disincentives to a health and HIV research career remain, including low status (compared for example to clinical practice), low salaries (improved recently to some degree by realignment of PNG IMR salary scales), the movement of senior health staff into management roles, and difficulties in helping Masters-level students or mid-level clinicians to enter research higher degree programs. For PNG IMR there are difficulties both in helping researchers prepare and move into research higher degrees ('pre-doctoral') and in post-doctoral programs that allow researchers to establish and maintain a significant body of work. For UPNG, the most important blockages are currently at the 'pre-doctoral' stage.

UPNG's SMAHS incorporates research within specialist medical training, requiring all Masters students to undertake a research activity, a process mirrored to a lesser extent in other training institutions. SMAHS notes that supporting adequate research quality is difficult and that there are reduced opportunities to identify and encourage clinicians with potential to focus more on research in their careers. Clinical experience derived from work in larger hospitals drives the majority of research topics, and current weaknesses in public health teaching means that population health or health systems are rarely research priorities in these programs. Most university stakeholders noted the competition between teaching and research for limited stretched resources, noting that teaching should take priority.[19] The few research programs in basic medical sciences at UPNG are focused on specialized topics that draw on the strengths of individual senior researchers.

PNG IMR has leveraged international institutional partnerships (including their 'buttressing coalition') of various kinds, which have been essential to supporting the leadership of specific research streams, and to the development of their research workforce, including cadetships and PhD training. There are few other active research collaborations that leverage international or domestic

[17] Thematic Evaluation of AusAID Support to PNG Research Institutions: Thematic Evaluation Report, p. 9-10

[18] ibid, p. 21

[19] The PNG Universities Review recommended "to Papua New Guinea universities and to the Papua New Guinea Government that the extreme research deficiency at Papua New Guinea universities be corrected gradually over the next decade, and in a way that does not disrupt progress in raising teaching standards" (p. 52)

partnerships, although there is one recent project for new, private sector funded laboratory research facilities at UPNG that involve collaboration with PNG IMR.

A number of detailed reviews, noted above, have identified specific areas for development within PNG IMR (and other institutions). One observation is that effective research requires effective administration and management. The need for improvement in these areas in PNG IMR has been well identified and is being addressed, with the use of external funding support.

3.4 Processes, People, Projects

In the design mission, a key framework to help stakeholders identify blockages and potential solutions in health and HIV research in PNG was: 'Processes, People, Projects':

- **PROCESSES:** Support to strengthen health and HIV research processes and structures
- **PEOPLE:** Support to strengthen health and HIV research human resource capacity
- **PROJECTS:** Support for key studies and operational research.

The Aide Memoire (Annex one) for the design mission was structured around these categories and they continued to act as a relevant cross-checking tool during the design process. It's likely that these categories will prove useful during future stakeholder engagement opportunities related to the PHHRC.

4. Theory of Change

Figure one summarizes this program's theory of change and shows the logic links between the proposed outputs and the Program purpose. The main principles underpinning this are to:

- Address key blockages as identified in the strategic analysis above, identifying the necessary changes in processes (and institutions), people and projects at each step;
- Support existing successes, in particular the PNG IMR's use of budget support to grow a sustainable program, and NACS model for research direction and management;
- Aim for several linked pathways to change, but avoid having one single pathway (for example avoiding making all investments depend upon a National Health & HIV Research Agenda);
- Seek to influence health care *practice* at subnational levels, as well as health *policy;* and
- Work for quality improvement within research currently embedded in training programs.

This design has also been influenced by the recognition, as noted in the strategic analysis above, that national functions for research coordination and dissemination also need to be supplemented by focused investment in the creation of research *demand:* policy-makers and health service providers will be much more likely to take-up research findings if they have been part of generating the questions that researchers respond to. As demonstrated for HIV by the National AIDS Council research processes, a new national health research agenda will also have greater force if national stakeholders have control of a grants program that funds research into identified national priorities. The design and diagnostics prepared by AusAID Indonesia for the Knowledge Sector Program[20] are relevant, summarised briefly as:

SUPPLY	DEMAND	INTERMEDIARY	ENABLING ENVIRONMENT
Selected organisations generate and communicate high-quality evidence to relevant policy makers	Selected government policy makers effectively demand and use high-quality evidence to inform social development policy	Selected organisations effectively translate the findings from research into policy options and policy options feed back into research	Important systemic and regulatory barriers to effective use of knowledge to improve service delivery are identified and mitigated

This design aims to invest in improved research *supply* (especially outputs 1.5, 1.6, 2.1 and 2.2) and research *demand* (outputs 1.1, 1.2 and 1.3). Based on the strategic analysis of knowledge translation functions (section 3.1 above) the PHHRC also intends to strengthen the role of the Health Research Unit in NDOH and the new National Health Research Council as research *intermediaries,* though recognizing that in the future other institutions may need to be supported to add to this role. Research supported by PHHRC may illuminate and advocate on critical aspects of the *enabling environment* but this program will not attempt to intervene directly in this area, leaving that to other programs of the government and its development partners.

The theory of change also recognizes the potential of an external development input to build capacity among policy-makers and researchers in the iterative process of identifying a health policy or practice problem and then refining it until it can be usefully addressed by a research project. This has been demonstrated in AusAID's work through the China-Australia Health and HIV/AIDS Facility[21], showing a clear role for external technical assistance in this process, as envisaged in Component 3 of PHHRC, especially in that component's support to outputs 1.1, 1.3 and 1.6.

[20] Table adapted by John Fargher from the AusAID (2011) Indonesia Knowledge Sector PDD (p. 26). See http://www.ausaid.gov.au/publications/pages/6907_4230_9750_6366_1236.aspx

[21] For example: "Engaging Development Assistance in Health in Support of Policy Development for China's Health Reforms." Oral Presentation, Conference on Health System Reform in Asia, Hong Kong, December 2011

The mechanisms driving the theory of change rest on assumptions in five important areas:

1. Coordinated external technical assistance can be applied to help rebuild national research leadership structures within and beyond the NDOH.
2. Conditions applied within new research grant programs will be sufficient to provide effective incentives in three key areas: *firstly* to help address some of the blockages to research career development; *secondly* to align research more tightly behind national health priorities; or *thirdly* to promote domestic institutional partnerships and collaborative research activities that result in capacity development of smaller research institutions.
3. Grants management systems can leverage off existing arrangements within NACS or PNG IMR (such as a replication of the ICRAS scheme), and additional grants oversight capacity can be established in a national body to put a national health & HIV research agenda into practice.
4. Development of a national research agenda can be done relatively quickly, with some preparatory work to collate existing evidence and create an inclusive process across government sectors (especially planning, health, NACS and education), non-government and academic institutions. PHHRC will need to revise the agenda within three to five years.
5. NACS Research Unit models, and some resources, for management of a national research agenda can be transferred to the new national body envisaged in this Program, noting that the new body will need to cover a much broader range of health threats and be more directly oriented to health system strengthening needs. The transfer will include:
    - effective continued work on HIV research needs;
    - integration of HIV (the health aspects of the epidemic in particular) within a broader National Health & HIV Research Agenda, noting that the National Research Agenda for HIV and AIDS requires revision in 2013.

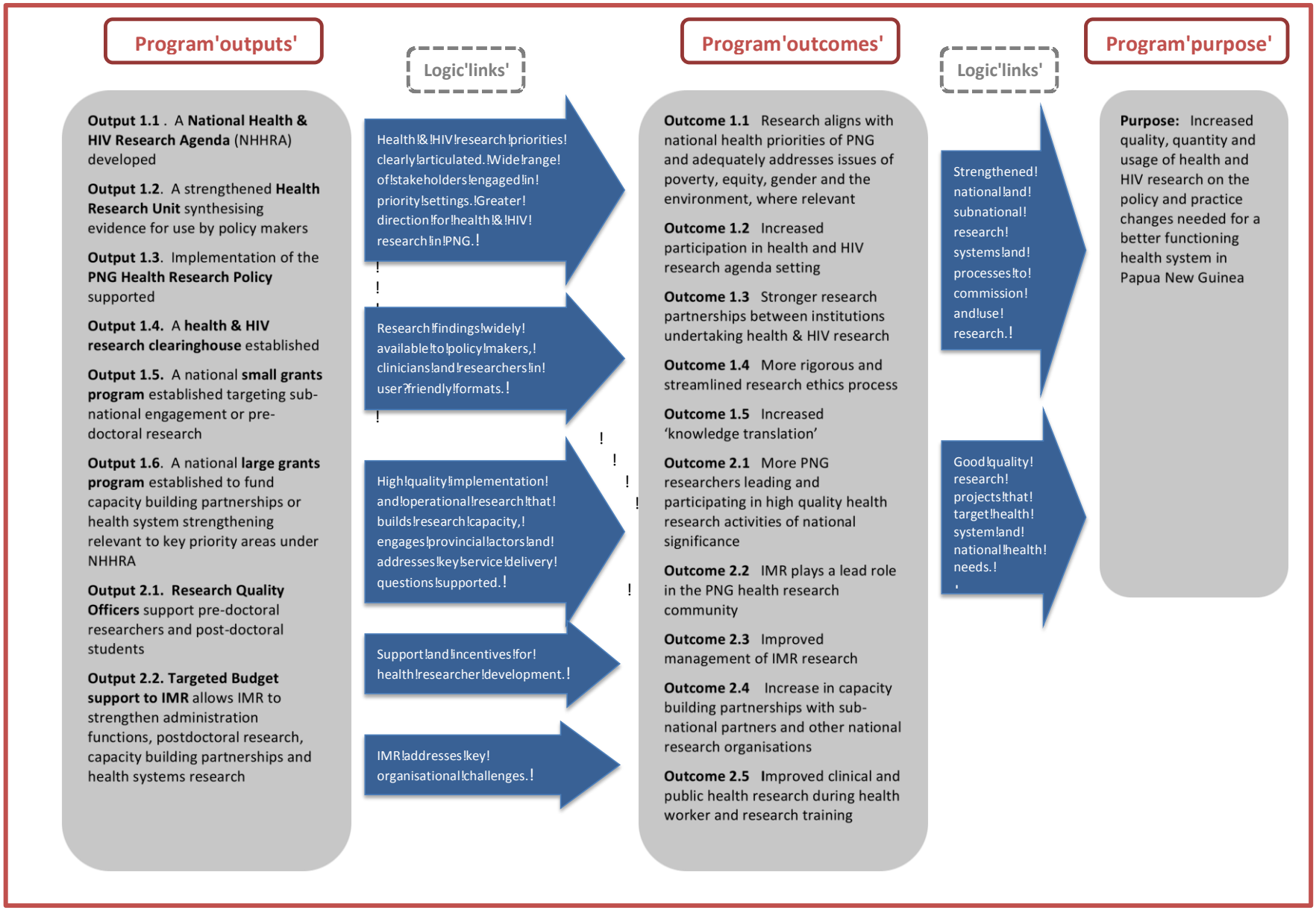
This design does not attempt to support all changes that are needed to strengthen health and HIV research in PNG. Some potential avenues (which could be revisited at a Program revision point) are only indirectly addressed by this theory of change, including:

- The GoPNG will consider whether the importance of HIV as a development issue requires continuation of a distinct HIV development research agenda alongside the inclusion of HIV issues within a national health & HIV research agenda.
- Some cross-cutting research topics (such as gender) may be addressed both within a National Health & HIV Research Agenda, and also by other agencies beyond the health sector.
- Academic scholarships, especially those for doctoral studies, will continue as a separate and active part of investment by AusAID and PNG IMR's other international partners.
- Discussions around formation of a National Public Health Institute will continue in parallel, noting that only some of the concepts floated for this are relevant to knowledge translation[22].
- The new SMAHS Taurama Postgraduate Studies Research Centre (TAPREC), will support a research program, including a research grant award and mentoring. This PHHRC design proposes to support Research Quality Officers, one of which could support TAPREC functions. Other direct support to TAPREC research actions is not currently included, although could be considered in future revisions. Research will also be a subject in an upcoming AusAID design to support SMAHS, which needs coordination with this PHHRC.

This design document suggests activities, implementation approaches and a theory of change that should be reviewed, and modified if necessary, within the first three years of PHHRC. This process will be facilitated by a review of the Program scheduled during Q2 of the third year of PHHRC implementation.

[22] Much of what has been proposed for inclusion in a National Public Health Institute represents a consolidation of public health functions, which may be well warranted, but fall outside the consideration of support to health research.

FIGURE ONE: PHHRC Theory of Change Diagram



5. Design

The initiatives of the PHHRC are grouped into four components (refer figure two below). Component one comprises activities delivered largely through, or by, the National Department of Health in its role as overseer of the national health system. Component two encompasses initiatives delivered through, or by, the PNG IMR with some collaboration with UPNG and other partners. Component 3 comprises a pool of technical assistance to support the implementation of components one and two. A fourth component covers monitoring and evaluation for the PHHRC, including assessment of aid effectiveness.

The remainder of this section describes each output of the Program, focusing on the first three years of implementation. At the midway point of Program Implementation, the deployment of an external mid-term review (see Annex 4: Monitoring & Evaluation Plan) provides an opportunity to reassess the direction of PHHRC. Critical considerations at this period will include:

- The degree to which PHHRC initiatives, especially grant programs, have been able to expend budgeted funds;
- Whether reorientation of targeted budget support to PNG IMR is required, for example in light of changes in its funding mix;
- The degree to which PHHRC's institutional strengthening activities have been successful

Maintaining PHHRC's flexibility and responsiveness is paramount given the rapidly changing research environment in PNG (refer section 2.1), and the uncertainty as to the speed at which the building blocks of the national health and HIV research system will take root and develop.

5.1 Program purpose and end-of-Program outcomes

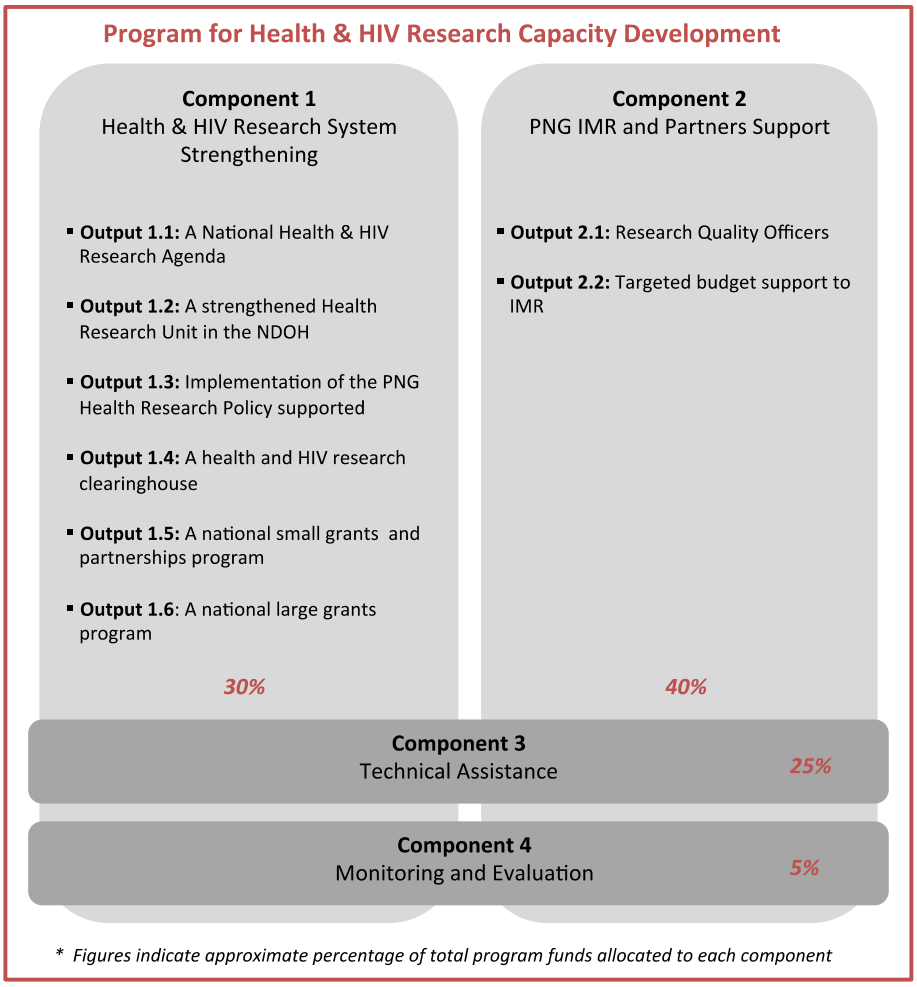
The PHHRC **purpose** is ***increased quality, quantity and usage of health and HIV research on the policy and practice changes needed for a better functioning health system in Papua New Guinea***, through:

- Strengthened national and subnational research systems and processes to commission and use health (including HIV*) research; and
- Good quality research projects that target health system and national health needs

Based on the Program's theory of change, PHHRC's output aim to lead to the following end-of-Program outcomes, noting that the M&E Plan (annexed) provide additional detail on their indicators and measurement:

Outcome 1.1: Research aligns with national health priorities of PNG and adequately addresses issues of poverty, equity, gender and the environment, where relevant;
Outcome 1.2: Increased participation in health and HIV research agenda setting;
Outcome 1.3: Stronger research partnerships between institutions undertaking health & HIV research;
Outcome 1.4: More rigorous and streamlined research ethics process;
Outcome 1.5: Increased 'knowledge translation' (i.e. greater exchange, synthesis and application of research evidence in health policy and service delivery);
Outcome 2.1: More PNG researchers leading and participating in high quality health research activities of national significance;
Outcome 2.2: IMR plays a lead role in the PNG health research community;
Outcome 2.3: Improved management of IMR research;
Outcome 2.4: Increase in capacity building partnerships with sub-national partners and other national research organisations;
Outcome 2.5: Improved clinical and public health research during health worker and research training.

FIGURE TWO: Program Design



5.2 Component One – Health & HIV Research System Strengthening

Output 1.1: A National Health & HIV Research Agenda

PNG requires a National Health & HIV Research Agenda, which articulates research priorities that are aligned with the National Health Plan 2011-2020 and National HIV Strategy 2011-2015. Globally, there are a number of well-developed methods for conducting this process[23] suitable for adaptation to PNG.

Experience within PNG[24] as well as internationally[25] indicates that the process of developing the Agenda should:

a) Involve a wide range of stakeholders, at one or more NHHRA workshop/s (perhaps piggybacked to another key health sector event such as the National Health Conference);
b) Incorporate enough lead time for significant preparation work to be undertaken[26], including the collation of existing evidence to present at NHHRA workshop/s;
c) Integrate the revision of the National Research Agenda for HIV and AIDS; and
d) Incorporate a plan for the revision of the NHHRA within the life of this Program.

[23] Collated in Priority Setting for Research for Health Management Process by the Council on Health Research for Development (COHRED)

[24] Such as the National Research Agenda for HIV in Papua New Guinea 2008-2013 and for the National Agricultural Development Plan.

[25] The COHRED Working Paper 1 (p.6) argues that, "Involvement of multiple stakeholders in priority setting is of fundamental importance both for the credibility of the process and to give the best possible chance to implementation of priorities."

[26] Steps 2 and 3 of COHRED 's 'Priority Setting for Research for Health: a management process for countries' inform this.

In addition to international examples, this process will draw upon the experiences of the Research Advisory Committee and it's secretariat, the Research Coordination Unit at NACS. Other recent experiences that will inform the process where the collation of evidence conducted by the Monitoring and Research Branch of NDOH prior to the development of the National Health Plan. Implementation of this output, based on these, should include a series of technical workshops, focusing on knowledge gaps in specific program areas, with topics identified and led by senior program staff. These will include a range of stakeholders, and be facilitated by NDOH to enable researchers expert in the priority program areas in PNG to present evidence syntheses to government program leaders. Provincial stakeholders, and those from non-government health providers, will be essential participants. Discussions with NACS suggests that it will be advantageous to conduct the revision of the national research agenda for HIV and AIDS at the same time as the construction of the broader national health agenda, leading to an integrated National Health and HIV Research Agenda.

Both NACS and the national health plan development experiences suggest that technical assistance (mobilized from the pool in Component Three) will be needed to support NDOH program leaders in defining and clarifying program priorities and preparing the collation of existing evidence prior to the series of NHHRA workshops. Technical assistance to help facilitate and record the workshop outcomes will also be valuable.

Experience with the National Research Agenda for HIV and AIDS in PNG 2008-2013 suggests that the NHHRA should be revised after three years to account for new knowledge and changing priorities.

Currently three options exist for the stewardship of the NHHRA process:

- Oversight by the Health Research Unit in NDOH (see Output 1.2 below);
- Oversight by the new PNG Health Research Council (see Output 1.3 below) with secretariat support provided by the Health Research Unit;
- Oversight by a new 'National Health & HIV Research Policy Committee' with secretariat support from the HRU that has an operating relationship to the PNG Health Research Council similar to that between the Research Advisory Committee and NACS. This committee could be a sub-committee of the National Health Board, or the Health Sector Partnership Committee (HSPC) and, like the new PNG Health Research Council, should involve key research stakeholders beyond NDOH.

PHHRC will:

a) Fund the NHHRA development process, including preparatory collation of information, workshops and relevant materials, as well as NHHRA reviews;
b) Support the inclusion and adaptation of NACS Research Coordination Unit procedures for revision of the National Research Agenda for HIV and AIDS into the development of a National Health & HIV Research Agenda;
c) Provide TA as requested by the relevant stewardship body;
d) Fund and facilitate partnerships with international bodies, if required to support the process, in particular annual reviews of research activity against the national agenda.
e) Fund the revision of the research agenda within the space of five years, for example to align with the latter half of the national health plan period and the next Medium Term Development Plan.

Output 1.2: A strengthened Health Research Unit in the NDOH

The PHHRC will provide additional resources to strengthen the Health Research Unit (HRU) within the appropriate location of the NDOH – building on existing experience and resources within the

Monitoring and Research Branch. Current needs include the identification and mobilisation of additional staff with a passion for research and its potential contribution to PNG's health system development, along with the appropriate experience to understand both policy-setting and researcher perspectives.

A strengthened Health Research Unit will carry out a 'knowledge translation' function to:

a) assess the implications of new and old research for national health policy and service delivery;
b) link researchers (including via the new PNG Health Research Council) and policy makers (including those in relevant reference groups and technical working groups which exist in the NDOH); and
c) have the capacity to make recommendations to the PNG Health Research Council to commission research on critical policy or implementation questions, including pursuing a dialogue between the HRU and researchers to ensure that research questions are formulated in a way that are answerable and useful.

This unit will draw heavily on the model established within NACS for management of research: one early activity will be to adapt the NACS research management manual (finalised in 2012) to a broader health research agenda. Particular NACS processes to study will: be the commissioning of research based on the national research agenda for HIV and AIDS, the split of functions between the NACS Research Advisory Council and the Research Coordination Unit, the successful engagement of a broad range of stakeholders in the process of ethical and peer review, and the procedures for seeking international support for ethical and peer review of some larger proposed activities. Technical assistance, working closely with the staff of the NDOH HRU will study these processes and adapt those that are relevant to the different management and governance systems required within NDOH.

The PHHRC will support a process of discussion around the resources currently deployed within the NACS Research Coordination Unit, to examine whether and how they may be applied to the creation of an expanded unit within NDOH, *and* whether and how they may be applied to the support of a multi-stakeholder body envisaged below. Some processes are only just now emerging within NACS research systems, such as the mapping of existing HIV research against the national research agenda and the assessment of the performance of the HIV research program. Study of these may be one useful subjects of an early large research grant envisaged under output 1.6 below.

A further early activity will be engagement with the GoPNG planning and finance sectors to negotiate a staged transition of this strengthened unit from external support to institutionalisation within government systems. Specific priorities to enable this are likely to include the listing of new HRU positions within government personnel schedules, and the creation of a government budget line for health research within Ministry of Finance systems.

To support the strengthening of the HRU, the PHHRC will:

a) Fund 3 positions for an initial period of three years: 1 x HRU Manager, 1 x Research Officer, 1 x Junior Research Officer;
b) Provide TA to support periodic in-position coaching, short-course training, advisory support and advice on roles in commissioning or assessing health system's research;
c) Focused TA to support the new unit's role in development of a NHHRA; and
d) Support professional connections for HRU staff both in-country (such as through the new Association of PNG Evaluators) and internationally.

HRU functions could potentially evolve into some of the policy research functions envisaged in a National Public Health Institute. Furthermore, the HRU is likely to be the most logical secretariat to the PNG Health Research Council (see Output 1.3 below). The three positions noted above may be positioned at different points in this Division, depending on function.

Output 1.3: Implementation of the PNG Health Research Policy supported

The PHHRC will support the implementation of the National Health Research Policy, a new policy that will provide the framework for a renewal of the functions of the Medical Research Advisory Committee (MRAC) in the form of the PNG Health Research Council (PNG HRC). Until such time as the PNG Health Research Council is operative, the current processes for ethics approval through the Research Advisory Committee (NACS) and the Medical Research Advisory Committee at IMR would be used. If necessary, PHHRC may be called up to support technical assistance in public health law if establishment of a new legal framework under which the PNG HRC will operate.

Support for implementation of the new National Health Research Policy will draw heavily on the model established within NACS for management of research. As noted above, adaptation of the manual and guidelines recently finalised by NACS will be an important early activity in this process. This should pay particular attention to systems established for NACS that involve multiple expert stakeholders, minimise conflict of interest in decision-making, provide an appropriate level of peer review from within or outside the country, and enable strategic national priorities to drive the allocation of resources.

There will be early emphasis on strengthening and re-establishing past MRAC processes for ethical and peer review. In addition there will be the creation of new processes for commissioning small and large grants under outputs 1.5 and 1.6. This last procedure will include the finalization of foundational grant conditions as discussed below.

The PHHRC will support a process of discussion around the resources currently deployed within the NACS Research Coordination Unit, to examine whether and how they may be applied to the creation of this body and its relationship to the strengthened Health Research Unit within NDOH (Output 1.2), which is likely to form the secretariat to the PNG HRC.

This component may also draw upon technical assistance resources incorporated in component three, possibly including the identification of 'hub-and-spoke' models of institutional collaboration (described below, section 5.4), to fund specific activities designed to build institutional partnerships for research between PNG and international research entities.

PHHRC will:

a) Fund, for an initial period of three years, a dedicated Health & HIV Research Coordinator position to support the new PNGHRC;
b) Make links with Australian organizations providing support to reviews of research ethics and quality reviews; and
c) Provide TA to support development of procedures to operationalise the new PNG Health Research Council, emphasizing the functions discussed above.

Output 1.4: A health and HIV research clearinghouse

PHHRC will assist PNG to develop a central repository for health and HIV research. The Health & HIV Research Clearinghouse would be managed by the HRU. HRU staff would be primarily responsible for uploading research papers and developing a policy summary for past research that describes, in plain language:

- the implications of the research for national policy;

- the implications of the research for service delivery;
- if possible, a short plan for testing the research product in implementation; and
- any research gaps identified.

Such summaries would be a requirement for future research funded through other parts of PHHRC.

This clearinghouse will draw on the NACS experience of presenting research findings in ways that are accessible to the broader population, and to policy-makers. The HRU will be encouraged to carefully examine the software database procured by NACS to assess its applicability to NDOH needs. This will also be linked to the collation of existing health data that was commenced by Monitoring and Research Branch in 2009 for the national health plan development. Development of clearinghouse functions will also examine the potential of combining grants management (Outputs 1.5 and 1.6) with the archiving of research findings.

Part of clearinghouse functions will be to identify existing forums that can be adapted to facilitating better connections between national and provincial policy-makers and managers, and researchers presenting findings. Such forums may include a regular policy and health systems session within the national medical symposium, sessions within the national health council, or focused workshops at regional or provincial levels.

PHHRC will support the clearing-house by:

a) Funding staff in the HRU under Output 1.2;
b) Funding the development of an online database, or the establishment of a PNG-dedicated component of an existing network (for instance, the Global Development Network, or a resource provided by existing AusAID Knowledge Hubs);
c) Funding forums for policy and research exchanges;
d) Providing TA to support peer-review functions and IT requirements.

Output 1.5: A national small grants and partnerships program

PHHRC will fund a small grants scheme to be administered by the HRU under broad oversight of the PNG HRC, with administrative, financial and monitoring support provided through the PHHRC support, as has been done with NACS research grants.

Small grants are seen as a flexible and feasible option for policy-makers, such as senior program staff within NDOH or their counterparts in development agencies, to establish increased demand for health systems and operation research in line with the NHHRA. If for some reason there is delay in development of the National Health & HIV Research Agenda, but the HRU is functional, then there may be opportunity to commence a round of small grants on topics relevant to the implementation of the National Health Plan. The PHHRC will borrow heavily from the NACS model currently in use to administer small grants[27].

The PHHRC small grants program will pay special attention to the need to harmonize with the continuing small grants program for HIV research that the GoPNG is continuing to fund through the NAC research function.

At least two rounds of small grants are envisaged in the first three years of PHHRC, one preceding the first award of Large Grants (to help establish systems) and one following. Foundational grant conditions will be discussed during the development of the NHHRA and finalized by the PNG HRC. It

[27] Further discussion is required regarding the transfer of NACS Research Coordination Unit resources to the new HHRU / the multi-stakeholder national body to oversee health & HIV research.

is planned that the grants scheme includes conditions in line with the PHHRC theory of change, and may for example create incentives that:

- all funded activities incorporate research capacity development, through pre-doctoral research support, and/or partnership between a larger and smaller institution,
- some grants include a subnational health service delivery agency – government or non-government; and/or
- some grants include provision for improved research management in the recipient institution.

PHHRC will fund:

a) Monies available for the grants;
b) Strengthening of assessment and monitoring functions within the HRU, with links to the national body responsible for carriage of the NHHRA; and
c) TA to support the strengthening of assessment of monitoring functions, drawing also on those established within PNG by NACS and other organizations.

Output 1.6: A national large grants program

PHHRC will fund a large 'linkages' grants program. The grants would be awarded for research which:

a) Is in line with NHHRA Priority Actions, particularly relating to under-funded disease areas.
b) Is specifically commissioned by policymakers – preferably the body that has carriage of the NHHRA;
c) Clearly targets building the capacity of the PNG health and HIV research system by linking multiple research organizations with at least two PNG partners, and the option for international partners, on each grant awarded.

As with Output 1.5, foundational grant conditions will be discussed during the formation of the NHHRA and be finalised by the PNG HRC. The grants scheme will include conditions in line with the PHHRC theory of change, prioritizing partnership as noted above, and encouraging applicants to include a subnational health service delivery agency – government or non-government. Grants may also include provision for improved research management in the recipient institution.

At least two rounds of large grants are envisaged in the first three years of PHHRC, commencing after the first round of small grants has helped establish systems. As noted above, it will be important that HIV research is given some priority, in line with the new NHHRA, in order to maintain current momentum in this area. One potential for consideration may be a single large grant for research into the impact and processes across the breadth of the current HIV response program.

It is noted that the current funding of large grants under this output is less than that previously provided through for HIV research directed by the NAC's RAC. This should form a specific point of monitoring with assessment as to whether the new national research coordination functions are proving successful and can absorb additional funds.

Management of these grants should rest with the HRU, working under direct supervision by the PNG HRC. The HRU will have a secretariat and administrative support role, as for small grants described in Output 1.5, however the role of the PNG HRC should be greater for the large grants program, with processes modeled on those employed by NACS, ensuring all stakeholders in the national body are involved, with appropriate measures to avoid conflicts of interest. Additional external TA may be required to provide expert assessment of research proposal quality to support the PNG HRC's assessments.

PHHRC will fund:

a) Monies available for the grants;
b) Establishment of assessment and monitoring functions within the national body; and
c) TA to support the establishment of assessment of monitoring functions, drawing also on those established within PNG by NACS and other organizations.

5.3 Component Two – Support to PNG IMR and Partners

Output 2.1: Research Quality Officers

PHHRC will fund two Research Quality Officers (RQOs), based in Port Moresby and Goroka. RQOs will be conjoint appointments with PNG IMR/UPNG and PNG IMR/UoG. The exact nature of what a conjoint appointment entails, particularly in terms of reporting relationships, will need to be considered during development of TORs and discussions with relevant institutions. Line management will rest with one organisation (for example the respective university), however recruitment will involve PHHRC, PNG IMR and the university. The RQO based in Port Moresby may be able to support research program functions at TAPREC, if agreed with SMAHS.

The role of the RQOs is to:

- Support students seeking to do postgraduate study to undertake health & HIV research by assisting them to develop and design research proposals and access funding;
- Actively strengthen the development of the national health & HIV research system by facilitating institutional collaborations;
- Identify talented researchers and help them identify relevant opportunities;
- Help postgraduate students publish research;
- Assist relevant students to access small grants through PNG IMR or through the national HRU.

PHHRC will fund:

a) Salaries for an initial period of three years;
b) Additional support for a limited amount of office and communications equipment, as well as travel, to enable the RQO function.

Output 2.2: Targeted Budget Support to PNG IMR

Targeted budget support to PNG IMR aims to encompass options highlighted in the Fargher and Heywood reviews and the PNG IMR Financial Management Systems Analysis: HHISP briefing note. Reports from recent briefings, and the recent significant management restructure within IMR, demonstrate that these recommendations are already being taken up and that flexible funding can be provided with increased confidence in PNG IMR systems.

While the funding will be provided as a flexible block grant under PNG IMR's control, as noted in governance arrangements, it will be monitored against designated purposes that align with the PHHRC theory of change. Relevant designated purposes for budget support may include:

a) Initiatives to strengthen PNG IMR support services (in particular, administration, finance and procurement);
b) A post-doctoral research program in a key area of need directly related to the requirements of the national health plan, closely linked to the development needs of PNG's health system;
c) Collaboration with external institutions for both institutional support and supply of researchers in critical areas.
d) Focused TA from within PNG IMR to support the development of tools to assess research activities under the national grants program or PNG IMR's own grants program.
e) A smaller flexible grants program that enables greater PNG IMR engagement with smaller research-capable institutions.

In relation to the last purpose, targeted budget support may be used to fund a small grants program similar to the existing ICRAS mechanism currently supported by the GoPNG. One intention is that this be enabled, under PNG IMR direction and in partnership with PNG IMR researchers to allocate funding based on agreed criteria, is available to any health organisations in PNG. Small grants could focus on specific needs of the National Health Plan identified by PNG IMR, such as those in the areas of health systems strengthening and operational research. Small grants that incorporate a partnership approach could allow:

- Provincial actors to access funding to design and conduct research projects relating to operational health issues at the sub-national level (drawing upon the AIGS and the NARI approach to research dissemination) under the guidance of a PNG IMR collaborator;
- Relevant researchers to develop 'pre-doctoral' research publications;
- Individuals to conduct operational research activities that have the prospect of leading to short-term service delivery improvements;
- Partnership activities that build the research capacity of other health organizations in PNG through work in collaboration with PNG IMR.

This component may also draw upon technical assistance resources incorporated in component three, possibly including the expansion of the IMR buttressing coalition, or another 'hub-and-spoke' model of institutional collaboration (described below), to fund specific activities designed to build institutional partnerships for research.

5.4 Component Three – Technical Assistance

PHHRC allocates 25% of the budget to a technical assistance pool that can be accessed to support initiatives in components one and two. The descriptions of outputs in Component One make specific mention of implementation tasks that are likely to require TA, especially in the first year of PHHRC.

The aim of a TA pool is to provide a mechanism ensures TA can be provided in a tailored way that is responsive to emergent needs. Particularly given the uncertain ways in which the NHHRA and the HRU will evolve, this flexibility is imperative.

A variety of short-term TA inputs are proposed, as one single long-tem advisor will not be able to address the variety of capacity development actions required. Institutions providing TA will be required to demonstrate an awareness of current thinking on TA processes that go beyond advisor placement to the use of technical support that builds sustainable capacity within PNG's people, institutions and systems. It is envisaged that provision of many different forms of TA will be needed, including some advisory support, but greater use of mentoring (including consistent support over time, using new communications technologies), short-course training and institutional partnerships.

For the last item, it will be helpful to build on those relationships established through the PNG IMR's buttressing coalition and expand these practices to include institutional twinning arrangements where both PNG and international institutions invest in joint training, proposal development and, in some instances, self-funded research. Other longer-term supports to consider for expansion may include the negotiation of joint academic appointments between PNG and international institutions that help enable international staff to spend longer periods of time in PNG, and PNG staff to gain recognition and career advancement.

A 'hub and spoke' model may be appropriate, whereby one or more suitable 'hub' institution(s) are identified by NDOH and/or IMR. Such institution(s) can then act as technically expert reference points for the identification of suitable consultants, and international institutional partnerships that

can support PNG institutions. Ideally, a hub institution would identify one contact person to provide assurance that TA requests for respective Program elements are as coordinated and integrated as possible.

Where possible, institutions that can provide a varied pool of support to PNG partners, but also maintain a consistent institutional relationship, will be provided. Options for arranging this are canvassed in the discussion of governance arrangements below.

5.5 Component Four – Monitoring and Evaluation

5% of the PHHRC budget has been set aside for monitoring and evaluation (M&E). A draft M&E Plan has been produced as a companion document to this draft design, as Annex 4. The M&E Plan provides a framework that will allow Program partners, including the GoPNG, the PNG IMR, AusAID and other partners to effectively monitor and evaluate the PHHRC.

The M&E Plan suggests guiding principles for the monitoring and evaluation process, outlines the levels of monitoring required, and includes a matrix with indicators that can be used by all program partners to measure the Program's performance. Methods of monitoring and evaluating the Program, sources of M&E information, responsibilities for data collection, and a timeline for data collection are also proposed.

External mid-term and completion reviews are suggested to evaluate progress towards expected outcomes and to establish the Program contribution to any changes. Terms of Reference should be prepared in consultation with major Program stakeholder, including GoPNG and PNG IMR. As well as one external reviewer, the Review processes should seek to engage a broad range of Program stakeholders, include significant self-evaluation, and ensure findings of the reviews are communicated directly to Program stakeholders and the public.

6. Governance and Management Arrangements

6.1 Component One

The outputs under component one of the PHHRC start within the remit of the NDOH, although they envisage the creation of a multi-stakeholder national body, the PNG HRC proposed within the new National Health Research Policy, to oversee health and HIV research and carry the NHHRA. In the initial stages, the governance arrangements for this component should simply comprise formal agreement between the Secretary for Health, and the AusAID Program Director, Health & HIV and the Program Manager appointed for PHHRC.

In the first three months of PHHRC the broad funding guidelines outlined for Component One in this document's budget will be expanded with additional detail. Budget items within Component One should be treated flexibly, allowing transfer within items as the needs of various outputs emerge.

At a later point, there is scope for governance arrangements to be broadened, involving the PNG HRC once established. It is likely that PHHRC will play a supportive role in establishing these functions, as noted under Output 1.3. It is likely that the current membership of the PNG HRC proposed in the new National Health Research Policy may need to be broadened to include educational institutions and other sectors of government, such as planning.

Discussions early in PHHRC will be required to discern whether and how NACS Research Unit resources can and should be transferred to national bodies (refer section 8.4 below). The process for transitioning relevant NACS Research Unit functions to the new HRU needs to occur in a way that:

- does not disable something that is currently working;
- effectively integrates HIV-relevant health research with the broader health research agenda; and;
- provides a similar level of administration and financing support as the NACS Research Unit currently receives (TA support, under component three, will assist to provide a robust system of accountability).

As discussed in Section 5.2 above, an early PHHRC activity will be to support NDOH negotiations with planning and finance sectors in the GoPNG to agree on a transition plan for functions supported by PHHRC within NDOH. Specific items raised by NDOH include the listing of new positions for research within personnel schedules and the creation of a cost item for research within Ministry of Finance systems.

6.2 Component Two

For Output 2.1, it is planned that PNG IMR will play a role in the technical support and mentoring of RQOs, but that these positions will be line-managed within the academic institutions to which they are attached.

For the initiatives delivered under Output 2.2 two of PHHRC, the continuation of the basic governance mechanisms in place for the Institute of Medical Research Core Support Program 2007-2011 is appropriate. Governance of the budget support needs to acknowledge the recent gains in administrative and financial capacity within PNG IMR, and balance the need for medium-term certainty of funding and flexibility in usage against the designated purposes of PHHRC funding described under Output 2.2.

Given that budget support to PNG IMR under PHHRC is targeted to these designated purposes, it is proposed that the PNG IMR provides an indicative multi-year budget for agreement with AusAID and

is monitored against that through mid-term and end-of-program assessment. Additional incentives for PNG IMR to apply the funds to the designated purposes will be derived from: the lead role that PNG IMR will play in the new PNG HRC and their obligation to report to that body on their activities in support of national research development; and from the incentives built in to grant conditions administered by the PNG HRC and the NDOH HRU (Outputs 1.5 and 1.6), many of which will be targeted by applications from PNG IMR, usually in partnership with other PNG institutions.

Noting how rapidly the PNG IMR's funding base has changed over the past five years, it is likely that the nature of targeted budget support provided by AusAID may need to change over the five years of the PHHRC.

6.3 Component Three

PHHRC will utilise the HHISP as the management agency to coordinate TA needs, identification and provision across both components. The HHISP should also be responsible for coordination of regular quarterly reporting and episodic assessment described under M&E (below and in the annexed M&E plan). Resources for this function should be drawn from Component Three.

It is intended that the provision of technical assistance will be demand driven but also strive for consistent institutional relationships between international (for example Australian) and PNG institutions. Requests to access the technical assistance pool will be initiated from within the bodies involved in delivering outputs under components one and two (e.g. the HRU, units within the PNG IMR, the MRAC). Requests for TA under component one should be approved by the Secretary for Health before submission to AusAID while requests originating under component two should first be approved by the Director of the PNG IMR.

It is likely that requests for technical assistance, once approved by AusAID, will be coordinated and sourced by the management agency (HHISP) on an as needed basis, and triggered by Tasking Notes. For TA to support the development of national leadership of health and HIV research, the PHHRC stakeholders may be able to consolidate requests across a number of functions (for example preparation of the NHHRA and strengthening of the HRU) into a single tasking note.

6.4 Component Four

Component four, monitoring and evaluation, will be managed and coordinated by the HHISP, drawing on resources allocated for this purpose. HHISP will undertake the primary M&E of technical assistance inputs, while for components one and two, the HRU and IMR will rely on their own internal M&E systems. HHISP will support the higher-level M&E of the overall investment, including coordination with PNG government and AusAID requirements for periodic external review.

Responsibilities for monitoring and evaluating the Program are outlined in the attached M&E Plan (Annex 4).

7. Cross Cutting Issues

7.1 Gender equality

PHHRC incorporates many opportunities to "promote equal opportunities for women and men as participants and beneficiaries of development.[28]" Particularly noteworthy initiatives in this regard are:

- **The development of the NHHRA,** which provides an opportunity for gender-related health threats to be given appropriate recognition. PHHRC will have a role in ensuring the process of developing the NHHRA makes specific mention of the health system and environmental constraints on women's ability to achieve optimal health, and adequately takes into account the gender dimensions of health.
- **The small and large grants programs,** which will be administered according to guidelines that will ensure equal participation for women researchers, and the mainstreaming of gender considerations. These grants provide opportunities for women researchers to access funding and for research to be conducted that specifically addresses women's health issues (particularly maternal health). PHHRC will ensure that foundational grant conditions discussed during the formation of the NHHRA will make specific mention of gender equality and the need to address constraints on women's health.
- PHHRC's initiatives to provide pathways for promising researchers, including **support provided by the RQOs**, will assist in the development of promising female researchers in PNG. PHHRC can help address gender balance at different levels in research career structures in PNG[29].

Issues of gender and development, such as violence against women, are important aspects of the research into HIV and related health threats. Such cross-cutting issues will be transferred into the discussions on the formation of the NHHRA, drawing on the experience so far within the National Research Agenda for HIV and AIDS. In addition, it is possible that other agencies beyond health will also need to consider inclusion of such issues within their research agendas.

Furthermore, it is likely that the findings and application of the research funded by PHHRC will – given their focus on health systems strengthening and operational research - directly impact women. As AusAID acknowledges, "A strong health system is needed to save lives and keep women and children well.[30]"

7.2 Child protection

PHHRC funding will be provided in a form that respects and promotes the need for child protection in the use of such funds. Technical assistance will be provided by institutions and individuals that provide explicit assurance of compliance with Australian government standards for child protection. PHHRC will also play a role in promotion of the awareness children's right to health and safety in the discussions around grant conditions, ethical review and procurement of international assistance, that take place within the HRU, the formation of the NHHRA and the establishment of functions of the PNG HRC.

[28] This is AusAID's gender and development goal, as articulated in the 'Guidelines for Gender and Development'

[29] It should be noted there gender equity in health research is quite well addressed in PNG. The Thematic Evaluation of AusAID Support to PNG Research Institutions points out (p.17) that, "53% of IMR staff... on postgraduate training are women", while "50% of IMR scientific staff... are women."

[30] Saving lives—Australia's aid for women and children, p,9

7.3 Sustainability

The Thematic Evaluation of AusAID Support to PNG Research Institutions highlighted the contribution of ongoing AusAID support to PNG IMR as a key factor in the organisation's increasingly sustainable financial and technical position[31]. PHHRC continues this support to PNG IMR, recognising the pressures tremendous growth brings to the institute and the invaluable role it needs to play in the development of the emerging PNG health and HIV research system.

Complementary to this, PHHRC seeks to develop the capacity of the health and HIV research system beyond PNG IMR – particularly by improving processes at the national level. This is necessary for a sustainable national health and HIV research system. The significant allocation of the PHHRC budget directed toward funding research projects also works to ensure that, whatever the outcomes of the institutional strengthening initiatives of the PHHRC Program (this concept is considered in more detail below).

As discussed at various points in Component One, an early PHHRC function will be to negotiate a transition plan with GoPNG. A particular requirement will be to support the NDOH in their discussions with planning and finance sectors to establish health research as a legitimate sphere of government spending. The work already done by the NAC for HIV research has helped establish a precedent in this area.

It is noted that the current funding of large grants under this Output 1.6 is less than that previously provided through for HIV research directed by the NAC's RAC. This is to manage the demands of start-up of new national research coordination functions and enable an early focus on new systems and procedures. However this should form a specific point of monitoring with assessment as to whether the new national research coordination functions are proving successful and can absorb additional funds.

7.4 Disability

PHHRC provides opportunities for research that contributes to improved health for people with a disability, in line with the Convention on the Rights of Persons with Disabilities[32], including quality of life for persons with a disability and reduced preventable impairments (in line with Core Outcomes 1 and 2 of the AusAID strategy[33]):

- **The development of the NHHRA** provides an opportunity to identify and address major causes of death and disability in PNG. PHHRC will have a role in ensuring the process of developing the NHHRA appropriately prioritises causes of disability and health system or environmental constraints that affect access to services and optimal health for people with a disability.
- **The small and large grants programs** will be administered according to the ethics approval process and guidelines that will seek to ensure that there is no discrimination in the selection and recruitment of actual and future participants by including or excluding them on the grounds of race, age, sex, sexual orientation, disability or religious beliefs, except where the exclusion or inclusion of particular groups is essential to the purpose of the research. These grants also provide opportunities for researchers to access funds for research to be conducted

[31] Thematic Evaluation of AusAID Support to PNG Research Institutions: Thematic Evaluation Report, p. v, 14-16

[32] UN General Assembly, Convention on the Rights of Persons with Disabilities: resolution / adopted by the General Assembly, 24 January 2007, A/RES/61/106, available at: http://www.unhcr.org/refworld/docid/45f973632.html [accessed 29 October 2012]

[33] AusAID (2008) Development for All: Towards a disability-inclusive Australian aid program 2009-2014. AusAID: Canberra. http://www.ausaid.gov.au/Publications/Documents/dev-for-all.pdf

that specifically addresses the causes and or the consequences of disability in PNG, in line with those priorities identified in the NHHRA.

- Initiatives to provide pathways for promising researchers, including **support provided by the RQOs,** will assist in the development of a cadre of promising researchers in PNG. It will be important that the terms of reference or position description for RQOs clearly specify that support be made available to all students, irrespective of race, age, sex, sexual orientation, disability or religious beliefs and that a core role of RQOs will be to encourage and support diversity in the cadre of PNG health researchers. RQOs should be a mechanism that ensures promising young researchers, including those with a disability, are supported in furthering their career.

8. Risk Management

8.1 Ensuring Multiple Pathways to Program Objectives

The need to improve the processes and systems for health and HIV research in PNG is clearly evident. Long-term solutions to eliminate the 'blockages' present in the PNG health and HIV research system ultimately involve highly complex, across-the-board capacity strengthening - many aspects of which are not only outside the control of this Program, but are in fact unknown. The PHHRC certainly endeavours to create and develop institutional capacity in key areas, but recognizes the inherent challenges in doing so, especially within the limitations of the Program's timeframe.

This potential risk was identified early in the design process and consciously mitigated by ensuring – during the design of the logic underpinning the Program's theory of change – that multiple pathways to achieving the Program's objectives were devised. The existence of grants programs, for example, ensure that, even if all other capacity building interventions designed to improve the health & HIV research system fail, Program objectives are still able to be attained.

8.2 Ownership of the NHHRA

There is widespread acknowledgement among stakeholders of the need for a National Health & HIV Research Agenda to direct health and HIV research in PNG. However, once the process of developing the NHHRA is underway, stewardship of the effort needs to rest with one particular party or group. There is a risk that if the NHHRA is developed too quickly, or is seen to be partial to a particular organization's needs, that it will not function effectively to direct the focus of health and HIV research and related funding.

To mitigate these risks, as many stakeholders as possible should be involved in the process of developing the Agenda. The Agenda needs to be a collaborative document, 'owned' to all health & HIV research system stakeholders to as great an extent as possible.

8.3 Sustainability of the HRU

The most ambitious institutional strengthening element of the PHHRC Program is the strengthening of the HRU within the Strategy Policy Division, Monitoring and Research Branch, of the NDOH. The experience of AusAID support to the NACS Research Unit is instructive and suggests that significant ongoing commitment and investment is required to sustainably strengthen this function in the PNG environment. In addition, the current absence of an Executive Manager, Strategic Policy, in the NDOH represents a critical leadership gap.

As a risk mitigation measure, the development of the HRU has the advantage of being able to draw heavily on the lessons learned by the NARCS Research Unit. This Unit has – with AusAID support – developed many research policy and protocols that could be used by the HRU. There is also potentially scope to second effective members of the NARS Research Unit to consult to or assist the HRU[34].

8.4 Disruption of Existing HIV Research Arrangements

Existing functional arrangements concerning HIV research in PNG will be disrupted as they are amalgamated into the NHHRA development and management processes envisaged by PHHRC. The risk this disruption poses to HIV research continuity has been partially mitigated by a design that allows for small grants (at least) to proceed even if there is a delay in the finalization of the NHHRA and its managing body.

8.5 Fragmented Program Implementation

There is a risk that the PHHRC may be implemented as a series of ad hoc initiatives, rather than as the integrated Program it is designed to be. This is especially relevant given that support to PNG IMR may simply be continuing in a 'business as usual' fashion.

In an effort to mitigate this risk, PHHRC includes two 'cross-cutting' components that respond to the program as a whole. The Program's M&E plan considers the Program as one entity, while the prospect of using a hub-and-spoke model for the management of TA is another option available to protect the intended integration of the Program.

8.6 Grant Funding Rounds

Risk exists around the management of the Program's various grants programs, in particular to ensure careful assessment that minimises conflict of interest and maximizes relevance to Program objectives. The Program logic relies on grant program conditions being strong enough to ensure that funded research does align with national priorities, promote capacity building partnerships and address the key blockages to research career development. The main approach to mitigation of this risk is to ensure good learning from NACS and NARI processes, and sufficient external TA to support the development of robust grant assessment, management and monitoring procedures.

8.7 The Need for Responsiveness

While a five year Program provides welcome stability for institutions supported under PHHRC, there is a risk that the Program may not adapt quickly enough to the changing environment. By entering a 'business as usual' mentality, the Program could miss opportunities to continually reassess the external environment. Mechanisms in place to mitigate this risk are the MTR, as well as governance structures that regularly take account of progress and invite annual scrutiny, by international partners, of the pattern of research activity compared to a national health research agenda.

[34] The expertise of Dr Wilifred Kaleva, a design team member, is especially relevant.

9. Budget Framework

		Total Project (AUD)
Component One: Health & HIV Research System Strengthening		
Output 1.1	A National & HIV Health Research Agenda developed	1,012,500.00
Output 1.2	A strengthened Health Research Unit in the NDoH	1,350,000.00
Output 1.3	Implementation of the PNG Health Research Policy supported	675,000.00
Output 1.4	A health and HIV research clearinghouse	675,000.00
Output 1.5	Small Grants and Partnerships Program	1,012,500.00
Output 1.6	Large Grants Program	2,025,000.00
	Subtotal	**6,750,000.00**
Component Two: PNG IMR and Partners Support		
Output 2.1	Research Quality Officers	675,000.00
Output 2.2	Targeted Budget Support to IMR	8,325,000.00
	Subtotal	**9,000,000.00**
Component Three: Technical Assistance		
	Subtotal	**5,625,000.00**
Component Four: Monitoring and Evaluation		
	Subtotal	**1,125,000.00**
	TOTAL	**22,500,000.00**

10. References

AusAID (2011). Australia-PNG Health Delivery Strategy 2011-2015.

Council on Health Research for Development (COHRED) (2010). Priority Setting for Research for Health: A management process for countries. Available at: http://www.cohred.org/downloads/Priority_Setting_COHRED_approach_August_2010.pdf

Council on Health Research for Development (COHRED). 2006. Priority Setting for Health Research: Toward a management process for low and middle income countries. Working Paper 1. Available at: http://www.cohred.org/downloads/cohred_publications/WP1_PrioritySetting.pdf

Fargher, John and Winnie Kiap (2011). Thematic Evaluation of AusAID Support to PNG Research Institutions: Thematic Evaluation Report.

Fargher, John, Winnie Kiap and Teatulohi Matainaho (2010). Research Support to the PNG Institute of Medical Research: Draft Independent Progress Report, July 2010.

Garnaut, Professor Ross and Sir Rabbie Namaliu (2010). PNG Universities Review: Report to Prime Ministers Somare and Rudd.

GoPNG National Strategic Plan Taskforce (2010). PNG Vision 2050

GoPNG. PNG Medium Term Development Plan 2011-2015.

Heywood, Alison, Robert Turare and Evelyn King (2008). PNG IMR HR Workforce Plan Design. Final Report, 8th March 2008.

PNG Institute of Medical Research (2012). Brief from Corporate Affairs and Support Services Division

PNG National Aids Council Secretariat (2008). National Research Agenda for HIV and AIDS in Papua New Guinea 2008-2013

PNG National Department of Health (2012). Health Research Policy.

ANNEX ONE

AusAID Support to Health and HIV Research in PNG

AIDE MEMOIRE

22 June 2012

Situation Analysis

1. This Mission to design the next phase of AusAID support to strengthen Health and HIV research in PNG occurs at a promising time. Firstly, the Government of PNG (GoPNG) has acknowledged that investment in research will be a "major determinant of PNG's future.[35]" In the long-run, the GoPNG aspires to direct 5% public investment into research and development[36]. Over the last five years, the GoPNG has demonstrated its commitment to funding research by significantly increasing recurrent funding to the PNG Institute of Medical Research (IMR).

2. Secondly, AusAID recently highlighted its intention to reorient its operating model in PNG to better support operational research in health and HIV[37], especially research with potential to realise immediate gains in service delivery. AusAID's support to IMR over the last decade has been effective[38]. It has contributed to bringing IMR to a point where it is seeking to contribute more deliberately in building the capacity of PNG's health researchers, including by acting as a 'hub' institution within PNG's health and HIV research community. The recent establishment of a new research unit at IMR – Population and Demographic Surveillance - reflects an increasing focus on operational research.

3. Thirdly, stakeholders agree on the critical issues. All stakeholders consulted by the Design Team recognised the need for a more coherent approach to health research in PNG and exhibited a desire to increase collaboration between research institutes and to improving health research. They were also in agreement on the imperative of ensuring health and HIV research improves the lives of Papua New Guineans.

4. The conditions outlined above, coupled with the IMR's reduced dependence on AusAID core funding, represent an opportunity for AusAID to reorient the nature of its support to Health and HIV research in PNG.

Outcomes of Consultations

5. During the Design Mission, the Design Team met with clinicians, policymakers, researchers and educators from organisations including UPNG, UoG, the WHO, the NDOH, the NACS, NARI, AusAID, IMR, DNPM and the Eastern Highlands PHA.

[35] PNG Medium Term Development Plan 2011-2015, p.56. See also Vision 2050, p. 52
[36] Vision 2050, p.12
[37] Australia – PNG Health Delivery Strategy 2011–2015, p.10
[38] Thematic Evaluation of AusAID Support to PNG Research Institutions

Based on these discussions, the Design Team considers the following to be areas of broad consensus:

- Priorities for health research are not adequately articulated in the National Health Plan 2011-2020.
- There is a pressing need to develop a National Health Research Agenda which articulates research priorities that are aligned with the National Health Plan 2011-2020.
- The National Research Agenda for HIV in Papua New Guinea 2008-2013 has been an effective mechanism to guide research in HIV in PNG. It has relevance as a model for the health sector.
- Improved collaboration between organisations and individuals conducting health research is necessary.
- PNG should focus on health systems and operational research which can inform policy and result in tangible public health applications in the short-term.
- Critical human resource capacity gaps hamper the development of health research in PNG. Especially scarce are national Principal Investigators who can lead significant research projects, and 'Knowledge Translators' who are able to bridge the divide between research and policy.
- The NARI approach to dissemination of research findings through their practical application by development extension agencies may be relevant to the health sector. Such a model could challenge researchers to produce results that can be taken further through carefully measured implementation activities at provincial or district level. Such innovative implementation initiatives could represent an opportunity to link provincial and other subnational service providers (both government and non-government) with research outcomes.

Potential Areas to Direct AusAID Support

6. The following initiatives, grouped under three 'support areas', are being considered as part of a three-year [39]Health and HIV Research Support Program. The support areas reflect attempts to strengthen the research **process**, improve the skills and number of **people** involved in research, and support important discrete research **projects** respectively.

PROCESS: Support to Strengthen Health and HIV Research Processes and Structures

7. Support the Development of a **National Health Research Agenda (NHRA)**. Development of the Agenda would be led by the NDOH and involve a wide range of stakeholders (echoing the approach taken by NACS and NARI). Specifically, AusAID support could contribute to preparatory collation of existing evidence, including commissioning systematic reviews if deemed necessary.

8. Support the implementation of the **National Health Research Policy** (i.e. the policy that will replace the current MRAC). The unreliability of MRAC is a bottleneck to health research in PNG.

[39] Since the presentation of this Aide Memoire the Program timeframe has been increased to five years.

9. Strengthen a **Health Research Unit** (HRU) within the Strategic Policy Division of the NDOH. The primary function of the HRU would be to act as an institutional 'knowledge translator' by assessing the implications of new research for national health policy and service delivery. It would be provided with resources to be able to commission research. The HRU would be custodians of the National Health Research Policy and potentially act as a secretariat during the development of the National Health Research Agenda.

10. Provide **targeted budget support to IMR** to allow it to pursue relevant priorities within the NHRA, or those relevant to the National Health Plan 2011-2020 while the NHRA is under development.

11. Establish a '**clearinghouse' of PNG Health and HIV Research**. If possible, this resource should be online (potentially utilising existing online research networks). Submitted articles would include an obligatory policy summary that describes, in plain language:
    a. the implications of the research for national policy;
    b. the implications of the research for service delivery; and
    c. any research gaps identified.

PEOPLE: Support to Strength of Health and HIV Research Human Resource Capacity

12. Fund **Research Design Quality Improvement Officers** (Research Quality Officers), to be co-located at IMR/UPNG and/or IMR/New Clinical School in Goroka. Fundamentally, these officers exist to support students seeking to do postgraduate study to undertake health research by assisting them to develop and design research proposals and access funding. The Research Quality Officers would also have roles in:
    a. Talent identification;
    b. Helping postgraduate students publish research; and
    c. Facilitating institutional collaborations.

13. Fund a **small grants scheme** for Masters level research activities or pre-PHD 'small research' publications. The objective of this funding is to support individuals to publish, thus presenting a pathway to undertaking a PhD.[40]

14. Provide **Targeted budget support to IMR** to strengthen IMR support services, in particular, administration, finance and procurement. Sustainability depends on ensuring future funding applications cost in sufficient support services and maintenance of equipment.

15. Make available a pool of funding for **capacity development** in priority health topics, including infectious diseases with support for joint learning programs with international institutions where appropriate.

16. Provide **mentoring support** to the Health Research Unit and the Research Design Quality Improvement Officers. This could involve engaging an existing body, such as

[40] Scholarships to undertake PhDs are available. A limiting factor in the PNG context appears to be necessary pre-PhD support for motivated individuals.

IMR's buttressing coalition, or identifying relevant new or existing twinning arrangements.

17. Support the **IMR to fund post-doctoral research to establish health system research** in collaboration with external institutions.

PROJECTS: Support for key studies and operational research

18. Establish and promote an **Innovative Implementation Initiatives Program** (I^3), whose purpose is to enable provincial actors to access funding to design and conduct research projects relating to operational health issues at the sub-national level (drawing upon the AIGS and the NARI approach to research dissemination).

19. Establish a **Small Grants Program** that prioritises health systems strengthening (particularly to implementation or operational research activities leading to short-term service delivery improvements) and NHRA Priority Actions. IMR's internal small grants program should be used as a model, although the existing GoPNG support to PNG IMR for this program should be encouraged to continue.

20. Establish a **Large Grants Program** to fund:
    - NHRA Priority Actions;
    - Commissioned research required by policymakers;
    - Research into diseases such as Pneumonia & Diarrhea, which do not attract international funding yet represent a substantial proportion of the burden of disease in PNG.
    - Particular themes (e.g. Maternal Health, Tuberculosis, HPV, health systems).

ANNEX TWO

STAKEHOLDERS CONSULTED DURING DESIGN MISSION (18-22 JUNE 2012) AND FOLLOW UP VISIT (30-31 JULY 2012)

Design Team			
Mr Pascoe Kase	National Department of Health	Secretary	Pascoe_kase@health.gov.pg
Professor Peter Siba	PNG Institute of Medical Research	Director	peter.siba@pngimr.org.pg
Dr Wilfred T Kaleva	National Aids Council Secretariat	Research Manager, Research Co-ordination Unit	wkaleva@nacs.org.pg; wtkaleva@yahoo.com
Dr Geoff Clark	AusAID	Program Director, Health & HIV	Geoff.clark@ausaid.gov.au
Dr Chris Morgan[41]	Burnet Institute	Specialist Research and Strategic Adviser	cmorgan@burnet.edu.au
Ms Jess Davis	Burnet Institute	M&E Specialist	jdavis@burnet.edu.au
Mr Benjamin Day	Independent Consultant	Design Specialist	benjaminsday@hotmail.com
Mr Freddy Hombuhanje[42]	AusAID	AusAID Representative, Eastern Highlands Province	Freddy.Hombuhanje@ausaid.gov.au
Ms Gertrude Namunu-N'Dreland[43]	AusAID	Assistant Program Manager – Health	Gertrude.Namunu@ausaid.gov.au
Ms Marion Brown[44]	Burnet Institute	Off-shore M&E Specialist	mbrown@burnet.edu.au
University of Papua New Guinea			
Professor Sir Isi Kevau	UPNG School of Medicine and Health Sciences	Executive Dean, SMHS / Consultant Physician and Cardiologist, POM General Hospital	Isi.kevau@gmail.com
Professor Glen Mola	UPNG School of Medicine and Health Sciences	Obstetrics and Gynaecology Department	glenmola@dg.com.pg

[41] Dr Morgan did not travel to Goroka with the team
[42] Mr Hombuhanje joined the team in Goroka
[43] Ms Namunu-N'Dreland joined the team in Goroka
[44] Ms Brown did not take part in the consultations in PNG

NACS			
Mr Philip Tapo	National Aids Council Secretariat	Acting Director	ptapo@nacs.org.pg
Ms Julie Airi	National Aids Council Secretariat	Manager, Behaviour Research & Information	jairi@nacs.org.pg
Department of National Planning and Monitoring (DNPM)[45]			
Mr Koney Samuel	DNPM	Assistant Secretary, Multilateral Branch, Foreign Aid Division	Koney_smauel@planning.gov.pg
Ms Loia Vaira	DNPM	A/Assistant Secretary, AusAID Branch, DNPM	Loia_Vaira@planning.gov.pg
WHO			
Dr William Adu-Krow	WHO	WHO Representative	adukroww@wpro.who.int
Dr Paulinus Sikosana	WHO	Technical Officer and Team Leader (Health Services Development and Health Care Financing)	sikosanap@wpro.who.int
Dr Rabindra R. Abeyasinghe	WHO	Technical Officer (Malaria)	abeyasingher@wpro.who.int
Dr Laura Guarenti	WHO	Team Leader, Maternal Newborn and Child Health	Guarentil@wpro.who.int
National Agricultural Research Institute			
Dr Sergie Bang	NARI	Deputy Director General	Sergie.bang@nari.org.pg
National Department of Health			
Mr Enoch Posanai	National Department of Health	Senior Executive Manager, Public Health Division	Enoch_posanai@health.gov.pg
Dr Sibauk Bieb	National Department of Health	Manager of Disease Control and Surveillance	Sibauk_bieb@health.gov.pg
Dr Leo Makita	National Department of Health	Principal Advisor of the NMCP	Leo_makita@health.gov.pg
Mr Ken Wai	National Department of Health	A/Executive Management, Strategic Policy	Ken_wai@health.gov.pg
Mr Patrick McCarthy	National Department of Health	Executive Organisational and Planning Management Adviser	patrick.mccarthy@hhisp.org
Ms Hinabokiole Kama	National Department of Health	Monitoring and Research Branch	
Dr Kitur Urarange	National Department of Health	Monitoring and Research Branch	
Ms Anna Irumai	National Department of Health	Monitoring and Research Branch	

[45] Details of other attendees required.

University of Goroka			
Associate Professor Dr Michael Mel	University of Goroka	Pro Vice Chancellor, Academic and Development	melm@uog.ac.pg
PNG Institute of Medical Research			
Mr Samson Akunaii	PNG Institute of Medical Research	Deputy Director, Corporate Affairs	samson.akunaii@pngimr.org.pg
Dr. Andrew Vallely	PNG Institute of Medical Research	Deputy Director - Science	avallely@kirby.unsw.edu.au
Dr. Paul Horwood	PNG Institute of Medical Research	Head of Environmental Health	paul.horwood@pngimr.org.pg
Dr. Kevin Soli	PNG Institute of Medical Research	Senior Research Fellow - Environmental Health)	kevin.soli@pngimr.org.pg
Dr Vela Solomon	PNG Institute of Medical Research	Clinical Research Fellow - Pneumonia Studies	vela.solomon@pngimr.org.pg
Ms Celestine Aho	PNG Institute of Medical Research	Scientific Officer	celestine.aho@pngimr.org.pg
Dr. Inoni Betuela	PNG Institute of Medical Research	Head of Vector Borne Disease Unit & senior clinical research fellow	ibetuela@gmail.com
Dr. Moses Laman	PNG Institute of Medical Research	Research Clinician	drmlaman@yahoo.com
Dr Justin Pulford	PNG Institute of Medical Research	Senior Research Fellow	Justin.pulford@pngimr.org.pg
Ms Lisa Valleley	PNG Institute of Medical Research	Head of Sexual and Reproductive Health	Lisa.vallely@pngimr.org.pg
Ms Geraldine Maibani	PNG Institute of Medical Research		Geraldine.maibani@pngimr.org.pg
Mr Denver Kave	PNG Institute of Medical Research	HR Manager	Denver.kave@pngimr.org.pg
Mr Ulo Jasipa	PNG Institute of Medical Research	Finance Manager	ulo.jasipa@pngimr.org.pg
Dr. William Pomat	Institute of Medical Research	Head of Infection & Immunity	william.pomat@pngimr.org.pg
Dr Manuel Hetzel	PNG Institute of Medical Research	Head of Population Health\Demography	
Eastern Highlands Province Representatives			
Mr Ben Haili	Eastern Highlands Provincial Administration	Provincial Health Adviser	bhaili@global.net.pg
Dr Joseph Apa	Goroka Base Hospital	Former CEO, recently appointed head of EHP Provincial Health Authority (PHA)	dr.josephapa@gmail.com
Absent during consultations			
Professor John Vince	UPNG School of Medicine and Health Sciences	Deputy Dean, SMHS, TAPREC Director	jvince@datec.net.pg
Professor Frank Griffin	UPNG	Executive Dean, School of Natural and Physical Sciences	frankg@upng.ac.pg; fkgriffin@gmail.com

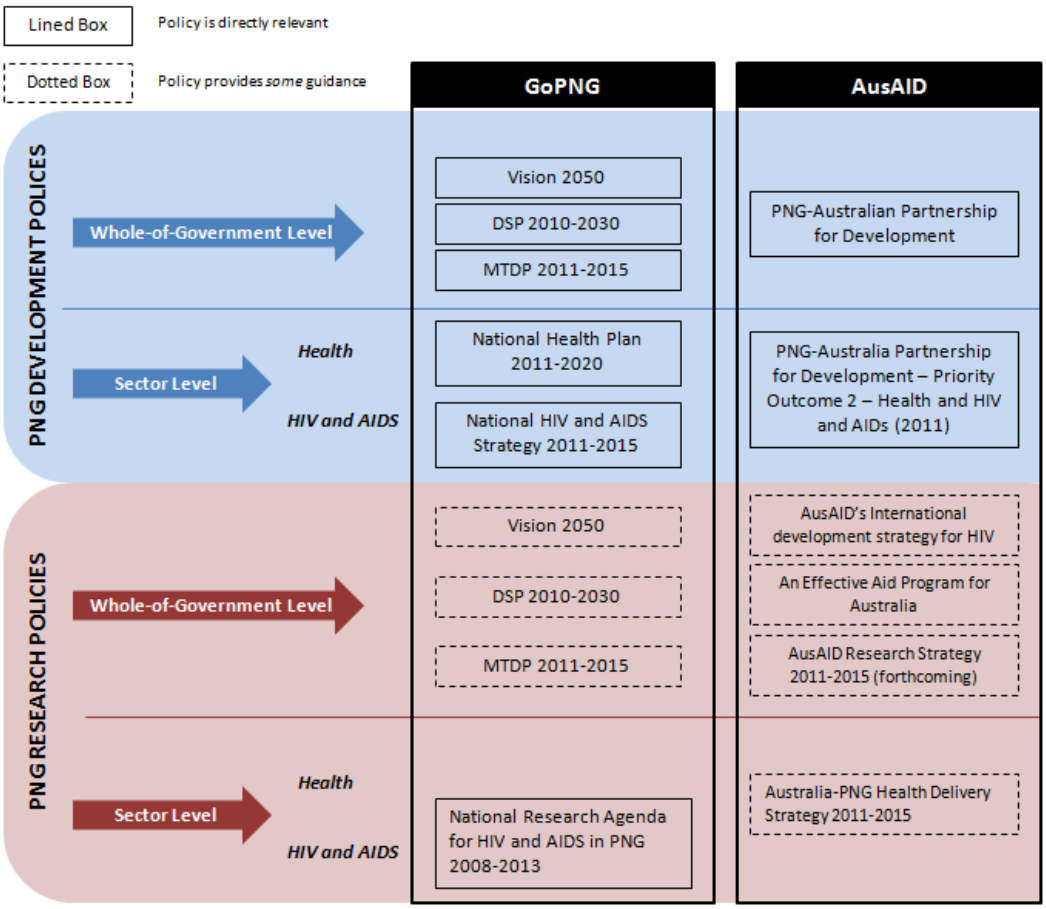
Professor Lohi Matainaho	UPNG School of Medicine and Health Sciences	Pharmacology Discipline Leader	lmatainaho@yahoo.com
Ms Anna Maalsen	NDOH	Public Health Adviser	Anna.maalsen@jtai.com.au
Dr Paison Dakulala	National Department of Health	Deputy Secretary, National Health Services and Standards	Paison_dakulala@health.gov.pg

ANNEX THREE

The Place of Research in Current Health and Development Policies

Figure one depicts the policy framework the proposed PNG-Australia Health and HIV Research Strengthening Program (HHRSP) will operate within. (A detailed matrix, derived from this diagram, forms an attachment to this Annex). Figure one reveals that there is a very well-established policy and framework to guide development priorities, both at the whole-of-PNG level and at the sector level for Health and HIV and AIDS. In the area of research, however, GoPNG and AusAID policies and priorities are much less well developed.

FIGURE ONE: The Existing Policy Framework Relevant to HHRSP



Development Strategies

Whole-of-Government Level

Vision 2050 describes a national vision for long-term development in PNG. It identifies seven strategic focus areas, or 'pillars' which must be addressed to ensure PNG can be in the top 50 in the UN's Human Development Index by 2050. The **Development Strategic Plan 2010-2030** (DSP 2010-2030) translates the pillars of the Papua New Guinea Vision 2050 into policies and objectives. As its name suggests, the PNG **Medium Term Development Plan 2011-2015** (MTDP2011-2015) is a 5 year rolling development plan providing a framework for investment over the medium term.

Vision 2050 explicitly acknowledges PNG's poor social development performance since Independence[46]. Significant Human Capital Development is recognized as a fundamental to PNG achieving its development goals and realizing its potential. Consequently, the DSP 2010-2030 and the MTDP 2011-2015 feature a heavy emphasis on improving service delivery and health outcomes. There is an expectation that the cascading policy framework formed by these documents provides the basis for each key sector in PNG to develop their own plans.

The PNG-Australia Partnership for Development documents a shared vision for improved quality of life for Papua New Guineans. The Partnership document designates five priority outcomes which the respective governments will work in partnership towards. Priority three is 'improved health outcomes.'

Health and HIV and AIDS Sectors

The **National Health Plan 2011-2020** guides health sector development in PNG. The NHP outlines eight key result areas for the health sector over the next decade. The Plan prioritises service delivery, acknowledging that, "the state of [PNG's] health system requires a 'back to basics' approach in the coming ten years." A health systems approach is implicit, with key result area three being 'strengthening health systems and governance." The **National HIV and AIDS Strategy 2011-2015** (NSP 2011-2015) categorises HIV and AIDs priorities for the next 5 years. The NSP (2011-2015) conveys NACS' function as a body which addresses HIV and AIDS as a development issue in PNG, rather than purely a health challenge.

The **PNG – Australia Partnership for Development: Health and HIV schedule** and the **Health Delivery Strategy 2011 - 2015** aim to improve maternal and child health outcomes and deliver increased services to the rural majority. AusAID's intention is to support the Papua New Guinea government's National Health Plan 2011-2020 (NHP). This recognises that supporting the Government of Papua New Guinea (GoPNG) to create an efficient health system is the most effective and sustainable approach to delivering health services of an internationally accepted standard. To achieve this, they identify six priority results areas where Australian aid can make a difference: health financing, medical supplies, infrastructure, health workforce, public health and community mobilisation. This is supported by a mix of aid delivery mechanisms including direct financing, procurement services, capacity development and implementation support, scholarships, and service agreements with development partners and PNG training and research institutions.

Research Priorities and Strategies

Whole-of-Government Level

The GoPNG does not currently have a guiding national policy which communicates research priorities. The pressing need for a National Research Agenda has been identified[47], while suggestions have also been made about the need for PNG to have a National Research Council[48] . An independent review of the University Sector, recommended the establishment of a Papua New Guinea Research Council. Despite the absence of a clear national research agenda at present, or a high-level governing body, the GoPNG recognises that *"*research is critical for advancement in modern society.[49]*"* To this end, Vision 2050 commits to allocating 5% of PNG's total public investment budget to research. Likewise, an objective under Section 4.7 ('Research, Science and Technology) of the DSP 2010-2030) is to double the level of investment in 2010 by 2030.

[46] Vision 2050, p. 1

[47] Thematic Evaluation of AusAID Support to PNG Research Institutions: Thematic Evaluation Report, p. v, 8, 21,23

[48] PNG Universities Review, p.4

[49] Vision 2050, p. 52

The MTDP 2011-2015 contains specific strategies that are relevant to the design of the HHISP. Section 4.7 of contains 9 sector strategies for development of research, science and technology. The most relevant for HHRSP are the strategies to:

- Mobilise resources and strengthen capacities of all research institutions (#1);
- Develop strategic partnerships and alliances with internal and external research and development organisations and institutions as well as PNG universities (#2);
- Prioritise and coordinate funding of research and development programs aligning to PNG development needs (#4).

Recent indications are that these policy objectives are being supported in practice. The IMR, the NRI and NARI have each seen increased public funding over the last few years[50].

The AusAID Research Strategy 2011-2015 is forthcoming[51]. Many of the policy priorities likely to be articulated in this document have already been acknowledged. For instance, Recommendation 23 of the Independent Review of Aid Effectiveness is likely to be incorporated. It recommends that, "there should be more aid funding for research by Australian and international institutions, particularly in agriculture and medicine."

AusAID has demonstrated its commitment to developing research capacity in PNG via a number of dedicated programs (including ARDSF), as well as the provision of budget support the IMR, and NARI. It has a long history of providing support to the university sector, including UPNG, and of providing scholarships. AusAID does not have an overarching policy document guiding support to research in PNG. Instead, research is supported as a component of sectoral programs. AusAID recently commissioned a Thematic Evaluation of AusAID Support to PNG Research Institutions[52].

Health and HIV and AIDS Sectors

Key health sector policies developed recently provide little guidance in for PNG health research. The National Health Plan 2011-2020 does not directly articulate health research priorities. Moreover, the health sector's medium term development plan – produced in cooperation with the Department of National Planning and Monitoring to align with the MTDP 2011-2015 – is silent on the role health research could, or should, play in the PNG health system.

In contrast to the health sector, NACS has – with support from AusAID – developed a **National Research Agenda for HIV and AIDs in Papua New Guinea 2008-2013**. The document has three objectives, the first of which is to identify national research priorities. Priorities two and three relate to establishment effective systems for commissioning research and for disseminating research results respectively. Under objective one, ten prioritized areas of research are articulated.

Supporting health and HIV research in PNG is a clear AusAID priority. The Australia-PNG Health Delivery Strategy 2011-2015 explains that one of Australia's five new 'ways of working' will be to "support an operational research agenda, develop monitoring and evaluation capacity to track results, and regularly communicate a performance story[53]." More specifically, the Draft PNG Australia Partnership for Development, Priority Outcome 2 – Health and HIV/AIDS (2011) specifies that AusAID will "fund the Institute of Medical Research to develop and implement an agreed research agenda with National Department of Health."

[50] Thematic Evaluation of AusAID Support to PNG Research Institutions: Thematic Evaluation Report, p. 14

[51] Refer http://www.ausaid.gov.au/research/Pages/research-strategy.aspx

[52] Produced by John Fargher and Winnie Kiap and completed in January 2011

[53] Australia-PNG Health Delivery Strategy 2011-2015, p. 10

- An existing policy or prioritisation document is **denoted by red, bold text**
- Direct quotes from policy or prioritisation documents *are denoted in italics*

		GoPNG	AusAID
Development Policies			
Whole-of Government Level		✓ **Vision 2050** National vision for long-term development based on Seven 'pillars'. ✓ **Development Strategic Plan2010-2030** Translates the focus areas of the Papua New Guinea Vision 2050 into policies and objectives. Articulates seven core objectives. ✓ **Medium Term Development Plan 2011-2015** 5 year rolling development plan providing a framework for investment.	✓ **PNG-Australia Partnership for Development** Documents a shared vision to work in partnership towards improved quality of life for Papua New Guineans. Articulates 5 priority outcomes to work in partnership toward.
Sector Level	***Health***	✓ **National Health Plan 2011-2020** Articulates 8 KRAs for the health sector over the next decade	✓ **PNG Australia Partnership for Development, Priority Outcome 2 – Health and HIV/AIDS (2011):** The Health and HIV/AIDS schedule to the PfD articulates six priority focus areas for Australian support. • Priority Focus Area 5 supports the National Health Plan KRA 2 – 'Strengthen Partnerships and Coordination with Partners'. • *"Fund the Institute of Medical Research to develop and implement an agreed research agenda with National Department of Health."* • *"Fund National HIV research grants and training programs for researchers."* ✓ **Australia-PNG Health Delivery Strategy 2011-2015**
	HIV	✓ **National HIV and AIDS Strategy 2011-2015** Categorises HIV and AIDs priorities for the next 5 years	
Research Policies			
Whole-of-Government Level		☒ PNG does not current have a guiding national framework for research priorities, although development of a National Research Agenda has been suggested[54]. Existing policy documents that provide direction on national research priorities include:	☒ AusAID does not have a specific guiding framework for supporting in PNG. Existing policy documents that provide direction on national research priorities include:

[54] Thematic Evaluation of AusAID Support to PNG Research Institutions, p.21

		Vision 2050: • Commits to allocation 5% of total public investment budget for research. • *"Research is critical for advancement in modern society*[55]*"* • It recognises the *"need to increase, improve and support current research-based institutions and universities in order to produce top quality research and development outcomes that will provide solutions to challenges in areas such as medicine, climate change and disease patterns.*[56]*"* **DSP 2010-2030:** • Section 4.7 'Research, Science and Technology' contains a number of strategies to build PNG's capacity in research, science and technology. • The key indicator in this section is spending on science and technology. • The 2030 objective is to double the level of investment in 2010. **MTDP 2011-2015:** • Section 4.7 of the MTDP contains 9 sector strategies for development research, science and technology. Relevant strategies include: 1. *Mobilise resources and strengthen capacities of all research institutions* 2. *Develop strategic partnerships and alliances with internal and external research and development organisations and institutions as well as PNG universities* 4. *Prioritise and coordinate funding of research and development programs aligning to PNG development needs*	**AusAID Research Strategy 2011-2015** (forthcoming[57]) **AusAID's International development strategy for HIV** • Priority 5 aims to build the evidence base for an effective HIV response by supporting, *"partner countries to develop national HIV research agendas to better understand the epidemics and the impacts of HIV responses."* **An Effective Aid Program for Australia:** • Section 4.6 commits to developing *"deeper research partnerships with Australian universities and research institutions, and will look to support the development of centres of excellence in key areas. In line with the Independent Review, we will look to enhance our investment in agricultural and medical research."* • Recommendation 23: *"There should be more aid funding for research by Australian and international institutions, particularly in agriculture and medicine."*
Sector Level	***Health***	☒ No agreed Health Research Agenda for PNG exists	**Australia-PNG Health Delivery Strategy 2011-2015** • One of Australia's five new 'ways of working' will be to *"Support an operational research agenda, develop monitoring and evaluation capacity to track results, and regularly communicate a performance story."*
	HIV	✓ **National Research Agenda for HIV and AIDS in PNG 2008-2013** Articulates Research Priorities for HIV and AIDS in PNG **National HIV and AIDS Strategy 2011-2015:** • Priority Area 3: Systems strengthening:	

[55] Vision 2050, p. 52

[56] Vision 2050, p. 34

[57] http://www.ausaid.gov.au/research/Pages/research-strategy.aspx

		▪ Strategic priority 1: Improve strategic information systems - Cluster 1.2: Bio-behavioural research, - Cluster 1.3: Social, behavioural and operational research - Cluster 1.4: Coordination and management of research - Cluster 1.5: Utilisation of evidence	

ANNEX FOUR

Monitoring and Evaluation Plan

Program for Health & HIV Research Capacity Development in Papua New Guinea

4 December 2012

Table of Contents

Abbreviations

GoPNG	Government of Papua New Guinea
HIV	Human Immunodeficiency Virus
HRU	Health Research Unit
ICRAS	Internal Competitive Research Award Scheme
M&E	Monitoring and evaluation
MRAC	Medical Research Advisory Committee
NDOH	National Department of Health
NHHRA	National Health &HIV Research Agenda
PHHRC	Program for Health & HIV Research Capacity Development in PNG
PNG	Papua New Guinea
PNGHRC	Papua New Guinea Health Research Council
PNG IMR	PNG Institute for Medical Research
TA	Technical Assistance

M&E Plan Overview

This document provides a framework that will allow Program partners, including the Government of PNG (GoPNG), the PNG Institute for Medical Research (PNG IMR), AusAID and other partners to effectively monitor and evaluate the Program for Health & HIV Research Capacity Development in Papua New Guinea.

Section 1 provides an overview of the Program design

Section 2 outlines the purpose of the M&E Plan, which is to provide: information on progress towards intended outputs and outcomes; information on high-level Program outcomes; an opportunity for all stakeholders to create and share learnings about the effectiveness of Program strategies; and accountability for funding contributions received by the Program. The current draft Plan forms the basis from which Program stakeholders can further elaborate and agree on key monitoring and evaluation (M&E) questions, information that needs to be collected, and how and by whom that information will be collected, collated, analysed and shared.

Section 3 suggests guiding principles for execution of the M&E Plan.

Section 4 outlines the level of monitoring required, including at the activity and output level, regarding the quality of activity delivery, at the Program level regarding the quality of links across the program components, and at the outcome level.

Section 5 outlines a logframe with indicators that can be used by all program partners to measure the Program's progress and performance.

Section 6 suggests methodology for monitoring and evaluating the Program. Processes suggested include an initial M&E Planning workshop to build consensus and understanding amongst partners on information and actions needed to monitor and evaluate the Program and responsibilities for data collection, regular Program Management Meetings among a group of key partners to review progress, and an Annual Review Workshops attended by a larger group of organisations involved in the Program to present progress and learning and amend program strategies where required. An external Mid-Term and Completion Review managed by AusAID are also proposed. M&E questions are also proposed.

Section 7 outlines possible sources of M&E information and responsibilities for collection are proposed.

Section 8 maps out a timeline for collection and reporting of M&E information.

Program for Health & HIV Research Capacity Development in Papua New Guinea

MONITORING & EVALUATION PLAN

1. INTRODUCTION TO THE PROGRAM

The Program for Health & HIV Research Capacity Development in Papua New Guinea (PHHRC or 'the Program') is a five-year, AUD22.5m Program that seeks to increase the quality, quantity and usage of health and HIV research on the policy and practice changes needed for a better functioning health system in PNG. PNG IMR will play a significant role in this development as a 'hub' institution within PNG's research community. Key principles are to:

- Address important blockages in the areas of:
    - **PROCESSES:** Support to strengthen health and HIV research processes and structures,
    - **PEOPLE:** Support to strengthen health and HIV research human resource capacity,
    - **PROJECTS:** Support for key studies and operational research;
- Support existing successes, in particular the PNG IMR's use of budget support to grow a sustainable program, and the NACS model for research direction and management;
- Aim for several linked pathways to change, but avoid having one single pathway;
- Seek to influence health care *practice* at subnational levels, as well as health *policy*; and
- Work for quality improvement within research currently embedded in training programs.

PHHRC will do this through four linked components:

5. **Component one** supports the development of a new National Health & HIV Research Agenda for PNG, invests in a new Health Research Unit in the National Department of Health (NDOH), supporting an expanded national body for oversight of research activities and knowledge translation for improved health policy and practice.
6. **Component two** includes initiatives delivered through the PNG IMR and partners with conditional grants programs and targeted budget support.
7. **Component three** comprises a pool of technical assistance to support the implementation of components one and two.
8. **Component four** covers monitoring and evaluation.

Refer to the PHHRC Design Document for the Program's theory of change.

In the first three years of the Program, major outputs will include a PNG National Health & HIV Research Agenda (NHHRA), a clearinghouse for PNG-relevant health and HIV research, and a Health Research Unit (HRU) in NDOH. The Program also includes small and large grants programs, with clear conditions promoting capacity building partnerships between institutions, alignment with national health priorities, and 'pre-doctoral' research support. Research quality officers will support improved research during clinical and public health training and targeted budget support to PNGIMR will allow PNGIMR to play a leading role in guiding health research in PNG. The third year of the program is an opportunity to review progress, revisit the Program theory of change and test program assumptions during a Mid-Term Review, which should provide direction for the final two years of PHHRC (note that if program strategies are revised, this M&E plan will also need to be revised).

2. PURPOSE OF THIS M&E PLAN

The purpose of this M&E Plan is to:

- Provide information on progress towards intended program outputs and outcomes. Performance information allows program managers and other stakeholders to identify areas of the Program requiring improvement or re-direction and provides sound evidence for program and budget decisions.
- Provide information about high-level outcomes achieved by the Program.
- Provide an opportunity for all stakeholders to create and share learnings about the effectiveness of strategies employed in this program.
- Provide accountability of funding contributions to PHHRC.

The current draft Plan forms the basis from which Program stakeholders can further elaborate and agree on key M&E questions, information that needs to be collected, and how and by whom that information will be collected, collated, analysed and shared.

3. GUIDING PRINCIPLES OF THIS M&E PLAN

Underlying principles for this M&E Plan are:[58]

1. **Usefulness for program management and continuous learning** - Continuous 'real-time' monitoring of progress towards intended outputs and outcomes will allow Program Partners to make evidence-based choices regarding budgets and program strategies.
2. **Partnerships** – Monitoring and evaluation of this Program will be undertaken in a way that builds partnerships between Program stakeholders, supports ownership of the Program by GoPNG and builds stakeholder capacity, especially in the HRU and PNG IMR, to monitor and evaluate this and other programs in the future. Sharing of monitoring and evaluation data and learnings should occur through regular, open, and ongoing contact between Program partners, including joint evaluations and annual reflection meetings (Annual Review Workshops).

[58] These principles are in line with the 2012 AusAID Performance Management and Evaluation Policy. See: http://www.ausaid.gov.au/makediff/ode/Documents/performance_policy.pdf

3. **Transparency** - Performance of the Program should be open and transparent to partners and the public, particularly in relation to grant allocation procedures. As a minimum, progress information should be shared with all Program stakeholders on a regular basis and Program evaluations should be publicly available.
4. **Sound evidence** - All aspects of performance reporting should be subject to contest, and stand up to scrutiny and challenge by Program management, stakeholders and external individuals. Conclusions drawn from performance reporting and evaluation should be based on sound evidence, both quantitative and qualitative.
5. **Clear intent** – It is important that time is spent to build understanding and consensus among Program Partners regarding the theory of change and intended outcomes of this Program. This will require investment in engaging stakeholders early in the Program and regularly re-engaging with key stakeholder around Program progress towards these outcomes. At the same time, the Program and its M&E Plan must remain flexible and responsiveness to changing circumstances.
6. **Accountability for performance** - Good performance management is a key responsibility for all PHHRC partners. Responsibility for performance management and evaluation will be explicitly allocated to the various Program partners at the inception of the Program and should be regularly reviewed. Staff employed in the HRU will be firstly responsible to their government line managers.

Further guidance on evaluation standards and ethics are widely available.[59] Evaluators are encouraged to familiarise themselves with these resources.

4. LEVELS OF MONITORING

Three levels of monitoring are proposed:

1. Progress monitoring: Variance from planned inputs, activities and output, including quality of activity delivery, and accountability for expenditure by funded researchers, contractors, sub-contractors and partner agencies.
2. Performance monitoring: Monitoring of changes in quality and quantity of outputs and intermediate outcomes, including quality of coordination and links across Program elements, quality and nature of partnerships and relative performance of grants and technical assistance provided to different outputs across the Program.
3. Performance evaluation: Progress towards and achievement of intended outcomes, including policy and service delivery-level changes resulting from health research, determinants of successful partnership formation, and changes in communication channels between researchers and policy makers. This level also addresses overall questions of aid effectiveness. This should also include an initial assessment of what

[59] More information on evaluation ethics can be found on the website of the Australian Evaluation Society, www.aes.asn.au/images/stories/files/About/Documents%20-%20ongoing/code_of_ethics.pdf. Many publications on evaluation standards are available, for example: Yarbrough et al (2011) *The Program Evaluation Standards: A guide for Evaluators and Evaluation Users, Third Edition*. Sage Publishers.

represents value for money in externally funded research support and building measures to track this.

5. M&E LOGFRAME WITH INDICATORS

Narrative Summary	Indicators	Means of verification
OVERARCHING GOAL		
A better PNG health system.		
PURPOSE		
Increased quality, quantity and usage of health and HIV research on the policy and practice changes needed for a better functioning health system in Papua New Guinea, through: ○ Strengthened national and subnational research systems and processes to commission and use health (including HIV*) research ○ Good quality research projects that target health system and national health needs	• Number of policies, policy discussions and service delivery changes resulting from research findings • Stories of change using a standardised methodology to describe research-informed changes to policy and practice and changes in the communication process between research, policy and practice • Number of publications against each priority area of NHHRA, disaggregated by year, publication type (PNG peer-reviewed journal, international peer-reviewed journal etc), impact factor or eigen factor† of journals, and number of citations (or other agreed quality measures) • Number of PNG Principal Investigators‡ • Number of doctoral research projects completed and published that are directly relevant to health in PNG‡	Policy & Literature Review Mid-term and Completion Reviews

* Throughout this document 'health research' is intended to be inclusive of HIV-related health research and research into other important health issues in PNG

† See www.eigenfactor.com

‡ Must be disaggregated by gender of researcher(s)

Narrative Summary	Indicators	Means of verification
COMPONENT 1. HEALTH & HIV RESEARCH SYSTEM STRENGTHENING		
OUTCOMES		
Outcome 1.1 Research aligns with national health priorities of PNG and adequately addresses issues of poverty, equity, gender and the environment, where relevant	• Number of publications against each priority area of NHHRA, disaggregated by year, publication type (PNG peer-reviewed journal, international peer-reviewed journal etc.), impact factor or eigen factor of journals, and number of citations (or other agreed quality measures) • Number of research ethics applications and publications that investigate critical health questions relating to poverty, equity, gender and the environment in PNG	Policy & Literature Review PNG Health Research Council (PNGHRC) records

Outcome 1.2 Increased participation in health and HIV research agenda setting	• Number of relevant stakeholders 'meaningfully' engaged in NHHRA development process • Proportion of research actors with a research plan that aligns with NHHRA	NHHRA Workshop Report Policy & Literature Review
Outcome 1.3 Stronger research partnerships between institutions undertaking health & HIV research	• Number of joint research activities and scientific publications • Number of collaborations between research organisations, NGOs, and private/public sector • Number of MoUs between research institutions and/or number of future planned collaborations outside of PHHRC grant processes • Stories of change using a standardised methodology to describe changes in partnerships	PNGHRC and ICRAS Committee documentation on grant process Grant recipient annual and completion reports Mid-term and Completion Reviews
Outcome 1.4 More rigorous and streamlined research ethics process	• Number of ethics application processed, accepted and rejected • Lag time between application and ethics committee finding (average/spread) • Changes in quality of submissions over time • Cross-accreditation between ethics committees • Feedback from users and remedial action based on that feedback • Proportion of ethics applications detailing results dissemination and end-user engagement plans	PNGHRC records
Outcome 1.5 Increased 'knowledge translation' (i.e. greater exchange, synthesis and application of research evidence in health policy and service delivery)	• Stories of change using a standardised methodology to describe any changes in capacity and confidence of HRU staff to act as a bridge between researchers and policy makers and in communication channels between researchers and policy makers • Number of national or provincial policies or standards that explicitly draw on research products	Mid-term and Completion Reviews

OUTPUTS		
Output 1.1 A **National Health & HIV Research Agenda** (NHHRA) that identifies priority research areas and research objectives, in line with National Health Plan and the National HIV and AIDS Strategy, and addresses critical issues of poverty, equity, gender and the environment, where relevant	• Number of relevant stakeholders 'meaningfully' engaged in NHHRA development process • NHHRA endorsed by NDOH • Number of access/downloads NHHRA • Proportion of health research actors with a research plan that align with NHHRA	NHHRA workshop report Policy & Literature Review
Output 1.2 A strengthened **Health Research Unit** (HRU) in the NDOH synthesising evidence for use by policy makers	• Number and qualifications of HRU staff members • Number of research synthesis documents produced (literature reviews, reference group reports etc.) • Number of reference group meetings to share research findings with HRU/GoPNG • Number of policy briefs and presentations made to policy makers	HRU documentation
Output 1.3 Implementation of the **PNG Health Research Policy** supported	• Number of times ethics committee sits • Number of ethics applications processed, accepted and rejected • Lag time between application and finding (average/spread) • Proportion of applications revised based on comments	PNGHRC documentation
Output 1.4 A **health and HIV research clearinghouse** established for PNG-relevant health and HIV research	• Number of articles and summaries available on website • Number of website visits and downloads • Clearinghouse user feedback and stakeholder feedback	HRU documentation
Output 1.5 **A national small grants program** established targeting sub-national engagement or pre-doctoral research	• Number and value of grants distributed supporting sub-national or pre-doctoral research under each NHHRA priority area • Quality ranking of proposals during selection process • Number of research activities with ethics approval • A self-evaluation and independent review of the quality of the process for research activity selection	PNGHRC documentation on grant process (if grant round overseen by PNGHRC) Grant recipient completion reports Mid-term and Completion Reviews

Output 1.6 **A national large grants program** established to fund capacity building partnerships or health system strengthening relevant to key priority areas under NHHRA	• Number and value of grants distributed with capacity-building and/or health systems strengthening objectives under each NHHRA priority area • Quality ranking of proposals during selection process • Number of research activities with ethics approval • A self-evaluation and independent review of the quality of the process for research activity selection • Number of applications that are reviewed based on comments	PNGHRC documentation on grant process Grant recipient annual and completion reports Mid-term and completion reviews

Narrative Summary	Indicators	Means of verification
COMPONENT 2. SUPPORT TO PNG IMR AND PARTNERS		
OUTCOMES		
Outcome 2.1 More PNG researchers leading and participating in high quality health research activities of national significance	• Number of PNG Principal Investigators[‡] • Number of doctoral research projects completed and published that are directly relevant to health in PNG[‡]	PNGHRC documentation Universities/Journal databases/Policy & Literature Review
Outcome 2.2 IMR plays a lead role in the PNG health research community	• IMR takes a leading role in PNGHRC and NHHRA	PNGHRC and HRU documentation
Outcome 2.3 Improved management of IMR research	• Value and sources of grant funding managed through IMR • Researcher feedback on admin support	IMR documentation Researcher survey
Outcome 2.4 Increase in capacity building partnerships with sub-national partners and other national research organisations	• Number of joint scientific publications • Number of joint research activities • Stories of change using a standardised methodology to describe institutional strengthening attributable to partnership with IMR and determinants of successful partnerships	ICRAS documentation Journal databases Qualitative case studies

Outcome 2.5 Improved clinical and public health research during health worker and research training	• Number of Papua New Guinean Principal Investigators‡ • Number of pre- and post-doctoral health research papers published in national/international journals‡	PNGHRC documentation Journal databases/ Policy & Literature Review
OUTPUTS		
Output 2.1 **Research Quality Officers** support pre-doctoral researchers to develop high quality research proposals and undertake pre-doctoral research projects, and support both pre-doctoral and post-doctoral students to publish research findings	• Number of students completing pre-doctoral projects and the grades awarded‡ • Number of pre-doctoral and post-doctoral students publishing in peer-review journals‡, disaggregated by publication type, and journal impact factor or eigen factor (or other agreed quality measures) • Number of citations of published articles	Research Quality Officer reporting – information sourced from universities and journal databases
Output 2.2 **Targeted Budget support** allows PNG IMR to strengthen administration functions, postdoctoral research, capacity building partnerships and health systems research, including through a small grants program.	• Evidence of improved efficiencies in staffing, management, administration systems and compliance activities • Evidence of remedial action regarding issues raised • Number and value of grants distributed with capacity building partnerships, sub-national engagement, pre-doctoral or health systems strengthening objectives under each NHHRA priority area • Quality ranking of proposals during selection process • Number of research activities with ethics approval • An assessment of review process quality for research activity selection	IMR documentation ICRAS documentation on grant process Grant recipient completion reports Mid-term and Completion Reviews

‡ Must be disaggregated by gender of researcher(s).

6. M&E METHODOLOGY

6.1 Monitoring & evaluation processes

M&E Planning Workshop

The Program aims to establish robust information collection and feedback mechanisms to support ongoing quality control and program improvement. To this end, it will be necessary to bring together all Program Partners with responsibility for collection and analysis of M&E information to build understanding and consensus regarding the theory of change and intended outputs outcomes of this Project. This workshop should cover: background to the Program, the Program logic and theory of change, mapping of Program risks and assumptions and feasible mitigation strategies for these, responsibility for Program delivery and M&E, and M&E data collection and analysis techniques. If possible, this workshop will be integrated with initial National Health & HIV Research Agenda development workshops.

Collection of Output and Component-level Outcome Information

Activity managers (IMR, HRU, PNGHRC) will collect M&E information on progress towards outputs and outcomes relevant to their activities. Responsibilities for data collection are outlined in detail in Section 7 of this document. This monitoring data should then be:

- Reviewed quarterly in Program Planning Meetings for each Program component.
- Submitted to the Program Management Agency appointed for PHHRC (referred to here as the 'Program Manager') annually and presented and discussed at an Annual Review Workshop attended by the main Program stakeholders.

Analysis of M&E information

Analysis of M&E information will be conducted in line with the purpose and the guiding principles of this M&E plan. For example, joint data analysis and sharing of progress information will occur regularly in partnership and in a transparent fashion. Joint analysis will focus on providing sound evidence for continuous program improvement and learning. The aim will be to:

- Provide information on progress towards intended Program outputs and outcomes. Performance information allows Program partners and other stakeholders to identify areas of the Program requiring improvement or re-direction and provides sound evidence for Program and budget decisions.
- Provide information about high-level outcomes achieved by the Program.
- Provide an opportunity for all stakeholders to create and share learnings about the effectiveness of strategies employed in PHHRC.
- Provide accountability for funding contributions and allow GoPNG to accurately report expenditure to Parliament and citizens and manage aid more effectively, in-line with the Kavieng Declaration.[60]

[60] Kavieng Declaration on Aid Effectiveness: a joint commitment of principles and actions between the Government of Papua New Guinea and development partners, 2008.

Analysis of M&E information must happen at every level, including by activity managers during data collection and collation (IMR, HRU, PNGHRC), then by a broader range of stakeholders at Annual Review Workshops, and by the Program Manager.

Regular Program Management Meetings

We suggest quarterly meeting between key partners, including the Program Manager, NDOH and IMR, to ensure routinely collected information is used in a timely way. This may occur separately for each component. Documentation of these meetings should be distributed to a broad range of Program stakeholders and should guide the Program Manager in making necessary adjustments.

Annual Review Workshop

An Annual Review Workshop to assess progress towards intended outputs and outcomes are suggested. These meetings should be open to a broad range of stakeholders and should review and assess current M&E information in an inclusive and participatory manner. These reflection meeting should generate recommendations for any required changes in Program management. As in the regular Program Management Meetings, documentation of the Annual Review Workshops will be critical to continuous improvement and should be distributed to a broad range of Program stakeholders.

External Mid-Term and Completion Review

External mid-term and completion reviews are suggested to evaluate the extent to which intended outcomes have been achieved and to establish the Program contribution to any changes. The Mid-Term Review is an opportunity to review PHHRC and, if necessary, adjust program strategies. Terms of Reference should be prepared in consultation with major Program stakeholder, including GoPNG and PNG IMR. While we suggest that these Reviews be implemented by an external agency, the Review processes should seek to engage a broad range of Program stakeholders in the process, should include significant self-evaluation, and findings of the reviews should be communicated directly to Program stakeholders and should be made publicly available.

A Note on Baseline Data

Baseline data is unavailable for most of the performance indicators proposed in this M&E Plan. In some cases, it would be possible to collect baseline data, but this would be difficult and time-consuming. It is therefore suggested that data collection begin in the first year of the program and that stakeholder discussions at Annual Review Workshop focus on whether Program performance represents an improvement on the previous situation.

6.2 Monitoring & evaluation questions

1. Monitoring questions

Monitoring questions include:

- Is the Program being implemented as planned?
- Are the Program Partners collecting the required M&E information?

- Are there any major changes in the operating environment?

2. Evaluation questions

Component 1 evaluation questions

Evaluation questions include:

- Has the National Health & HIV Research Agenda process:
    - Increased participation in health research agenda setting?
    - Strengthened partnerships between organisations engaged in conducting and/or using health research?
    - Increased the amount/quality research that aligns with national health priorities?
- Has the implementation of the National Health Research Policy Committee led to more rigorous and/or streamlined research ethics process?
- Has the strengthening of the Health Research Unit in NDOH:
    - Increased the amount/quality research that aligns with national health priorities?
    - Led to a change in communication channels between researchers and policy makers?
- Is the Health & HIV Research Clearinghouse being utilised to share or receive information by researchers, service delivery organisations and/or policy makers? Is the format accessible? Is the Clearinghouse useful and how? How could the clearinghouse be upgraded to make it more effective?
- Are the Large and Small Grant Programs:
    - Assisting to build effective partnerships and capacity of organisations engaged in health and HIV research?
    - Enabling sub-national/provincial actors to participate in directing and conducting health and HIV research?
    - Increasing the volume, quality and relevance of health systems strengthening research?

Component 2 evaluation questions

- Are Research Quality Officers increasing researcher capacity to lead and participate in high quality health research?
- Is IMRs participation in the Program, including the IMR targeted budget support, enabling IMR to play a lead role in the PNG health research community?
- Are the Small Grant Programs:
    - Assisting to build effective partnerships and capacity of organisations engaged in health research?
    - Enabling sub-national/provincial actors to participate in directing and conducting health research?
    - Increasing the volume, quality and relevance of health systems strengthening research?
    - Supporting pre-doctoral researchers to undertake quality research?

Program-wide evaluation questions

- Has the Program:
    - Strengthened national and subnational research systems and processes to guide research questions and use health and HIV research?
    - Contributed to stronger partnerships between organisations engaged in conducting and/or using health research?
    - Increased quality, quantity and usage of health research?
    - Contributed to policy and practice changes needed for a better functioning health system?

Mid-Term and Completion Review evaluation questions

Mid-Term and Completion Reviews should be structured in line with OECD Development Assistance Committee (DAC) criteria for quality evaluations[61] including:

- **Relevance:** The Program is the most appropriate way to meet high priority goals that Australia shares with its development partners within the given context.
- **Effectiveness:** The Program is meeting or will meet its objectives, and is continually managing risk.
- **Efficiency:** The resources allocated by Program Partners are appropriate to the objectives and context, and are achieving the intended outputs.
- **Sustainability:** Significant benefits will endure after the Program has ceased, with due account given to partner systems, stakeholder ownership and plans for phase out.
- **Impact:** An assessment of the positive and/or negative changes (directly or indirectly, intended or unintended) produced by the Program.
- **Monitoring and evaluation:** An appropriate system provides sufficient information and is being used to assess progress towards meeting objectives.
- **Analysis and learning:** The Program is based on sound technical analysis and continuous learning
- **Gender equality:** The Program incorporates appropriate and effective strategies to advance gender equality and promote women and girls empowerment.

Mid-Term and Completion Reviews will also be responsible for gathering 'stories of change' (refer to Section 7 for details).

[61] See the following for further explanation of these terms: http://www.oecd.org/document/22/0,2340,en_2649_34435_2086550_1_1_1_1,00.html

7. M&E DATA SOURCES & RESPONSIBILITIES

Data source	Information provided	Responsibility
Policy & Literature Review	• Number of policies, policy discussions and service delivery changes resulting from research findings • Number of publications against each priority area of NHHRA, disaggregated by year, publication type (PNG peer-reviewed journal, international peer-reviewed journal), impact factor or eigen factor of journals, and number of citations • Number of publications that investigate critical health questions relating to poverty, equity, gender and the environment in PNG • Proportion of health research actors with a research plan that align with NHHRA	HRU/NDOH
HRU documentation	• Number and qualifications of HRU staff members. • Number of research synthesis documents produced (literature reviews, reference group reports etc.) • Number of reference group meetings to share research findings with HRU/GoPNG • Number of policy briefs and presentations made to policy makers • Number of research synthesis documents produced (website, paper, TWG, forums) • NHHRA endorsed by NDOH.	HRU/NDOH
PNGHRC documentation	• Number of research ethics applications and publications that investigate critical health questions relating to poverty, equity, gender and the environment in PNG • Number of joint research activities and scientific publications • Number of collaborations between research organisations, NGOs, and private/public sector • Number of ethics application processed • Changes in quality of submissions over time • Cross-accreditation between ethics committees • Lag time between application and ethics committee finding (average/spread) • Feedback from users and remedial action based on that feedback • Proportion of ethics applications detailing results dissemination and end-user engagement plans • Proportion of applications revised based on comments • User feedback on process (and subsequent remedial action by PNGHRC) • IMR takes a leading role in PNGHRC • Number of Papua New Guinean Principal Investigators (disaggregated by gender)	PNGHRC Targeted Budget Support to IMR

NHHRA workshop report	• Number of relevant stakeholders 'meaningfully' engaged in NHHRA development process • Number of access/downloads NHHRA • IMR takes a leading role in NHHRA	HRU/Program Manager
PNGHRC Grant Round documentation	From selection committee: • Number and value of key studies undertaken by IMR while NHHRA under development. • Selection committee comments on applications. • Quality of funded applications. Individual applications to provide information on: • Relevance to NHHRA • Plans for dissemination and intended end-use of research. Funding recipient reports to provide information on: • Number of joint scientific publications. • Number of joint research activities. • Number of collaborations with NGOs/private/public sector.	PNGHRC
ICRAS Grant Round documentation	From selection committee: • Number and value of key studies undertaken by IMR while NHHRA under development. • Selection committee comments on applications. • Quality of funded applications. Individual applications to provide information on: • Relevance to NHHRA • Plans for dissemination and intended end-use of research. Funding recipient reports to provide information on: • Number of joint scientific publications. • Number of joint research activities. • Number of collaborations with NGOs/private/public sector.	ICRAS (IMR)
Research Clearinghouse	• Number of articles and summaries available on website • Number of website visits and downloads • Clearinghouse user feedback and stakeholder feedback • Number of website visits and downloads • Number of Papua New Guinean Principal Investigators (disaggregated by gender)	HRU/NDOH
IMR documentation	• Evidence of improved efficiencies in staffing, management an administration systems and compliance activities • Evidence of remedial action regarding issues raised • Value and sources of grant funding managed through IMR. • Researcher feedback on admin support	IMR

Research Quality Officer reporting	• Number of students completing pre-doctoral projects and the grades awarded* • Proportion of pre-doctoral and doctoral students receiving ethics approval • Number of pre-doctoral and doctoral students publishing in peer-review journals*, disaggregated by publication type, and journal impact factor or eigen factor • Number of times published articles cited in peer-reviewed journal articles	Research Quality Officers/IMR
External Mid-term and Completion Review	• Stories of change using a standardised methodology to describe changes in: o Policy and practice, resulting from research o Communication process between research, policy and practice o Research partnerships o Institutional strengthening attributable to partnership with IMR o Capacity and confidence of HRU staff to act as a bridge between researchers and policy makers • Review of grant funding selection processes	External evaluator
Technical Assistance	• Number of short-term and long-term advisors recruited disaggregated by gender, skill set and area of focus • Advisor performance reports • Type of TA support • Total value of TA support • Analysis of the quality of support and the changes taking place as a result of TA support	HHISP

* Must be disaggregated by gender of researcher

8. TIMING OF DATA COLLECTION & REPORTING

The table below suggests the timing for collection of information required to monitor and evaluate the PHHRC. Importantly, most data information should be collected continuously throughout the five years of the Program by the responsible agencies outlined in Section 7 of this M&E Plan. To minimise reporting burden, each organisation will need to establish a system for this ongoing data collection that allows them to easily collate and assess performance information on a regular basis.

■ Data collection only
O Data collection & reporting

	2013				2014				2015				2016				2017			
Data source	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
NHHRA Workshop Report	■	O																		
Ongoing data collection by: ○ HRU ○ PNGHRC ○ IMR, including ICRAS ○ Research Quality Officers To be reported quarterly at Program Planning Meetings and annually at the Annual Review Meetings.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Policy & Literature Review by HRU	■	■	O	■	■	■	O	■	■	■	O	■	■	■	O	■	■	■	O	■
High-level M&E by HHISP	O	■	O	■	O	■	O	■	O	■	O	■	O	■	O	■	O	■	O	■
External Mid-Term Review										■	O									
External Completion Reviews																			■	O