



Health Resource Facility
for Australia's Aid Program

Medical Workforce Support Program (Vanuatu)

Investment design (revised and updated)

Gillian Biscoe

Toa Fakakovikaetau

Rob Condon

Scott Monteiro

Revised by Rob Condon in April 2015

Health Resource Facility
Mott MacDonald (Mott MacDonald Australia Pty Ltd)
GPO BOX 224, Civic Square ACT 2608
SAP House, Level 6, 224 Bunda Street
Canberra City ACT 2601
Tel: +61 (2) 6153 6100
www.australianaidhrf.com.au

Contents

Acronyms and Abbreviations	i
Map of Vanuatu showing provincial composition.....	iii
Executive summary	iv
Outputs and Activities under the Program.....	viii
Development Outcomes and Program Logic.....	ix
1. Introduction and program origin.....	1
2. Program preparation.....	2
3. Australian aid program context and support	2
3.1. Australian policy context.....	2
3.2. Australian support to the health sector in Vanuatu	3
3.3. Australian aid portfolio review, 2014.....	4
3.4. Other health sector development partners	5
4. Vanuatu country context	5
4.1. Geography, climate and environment.....	5
4.2. Government	6
4.3. Socio-economic development	6
4.4. Gender equity and child protection.....	6
4.5. Population.....	7
4.6. Education	7
4.7. People with disabilities	8
4.8. Technology	8
5. Vanuatu health context	8
5.1. Health indicators	8
5.2. Health system overview	9
5.3. Health Sector Strategy 2010-2016	13
6. Other key findings.....	14
7. The Medical Workforce Support Program (Vanuatu).....	14
7.1. Australian support	14
7.2. MWSPV design logic overview.....	15
7.3. How the MWSPV will contribute to higher level development outcomes....	15
7.4. How the MWSPV will work – the underlying principles	16
7.5. What the MWSPV will do – Activities and Outputs	17
7.6. Beneficiaries	22
7.7. Development outcomes – What the MWSPV aims to achieve.....	23
7.8. Risks.....	23

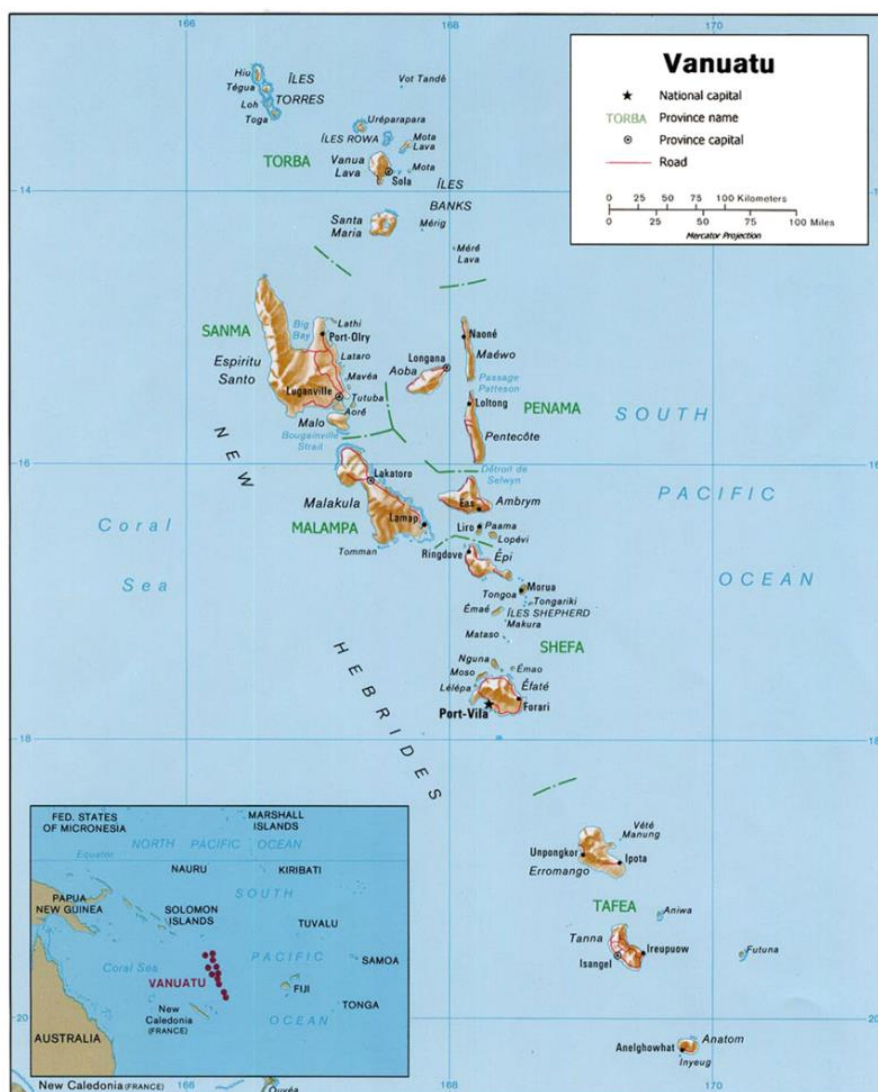
7.9. Child protection, social inclusion, gender equity	25
8. Monitoring and evaluation.....	25
9. MWSPV aid modality.....	26
10. Budget and Value for money	27
10.1. Indicative budget	27
10.2. Value for money	27
11. Implementation arrangements.....	28
Annex 1: Literature reviewed	30
Annex 2: Aide Memoire	31
Annex 3: Vanuatu medical workforce supply.....	36
Annex 4: Behaviour change and MWSPV.....	42
Annex 5: PCC terms of reference	46
Annex 6: Mutual obligations – GOV and DFAT	47
Annex 7: Budget	49
Annex 8: MWSPV principles	50

Acronyms and Abbreviations

API	Annual Malaria Parasite Incidence (per 1,000 population-at-risk)
ASO	Anaesthetic Scientific Officers
AUD	Australian dollar
AYAD	Australian Youth Ambassadors for Development
CMNHS	College of Medicine, Nursing and Health Sciences, FNU
CPD	Continuing Professional Development
DFA	Direct Funding Agreement (between DFAT and GOV)
DFAT	Department of Foreign Affairs and Trade, Australian Government
DG	Director-General for Health
DHS	Demographic and Health Survey
DP	Development Partner
EOPO	End of Program Outcomes
FNU	Fiji National University
FTE	Full time equivalent
FTMG	Foreign trained medical graduate (i.e. those trained outside the region at medical schools other than those traditionally serving the Pacific)
GBN	Government Broadband Network
GDP	Gross domestic product
GOPRC	Government of the People's Republic of China
GOV	Government of Vanuatu
HIS	Health information system
HRF	Health Resource Facility, Australian Aid Program
HRH	Human resources for health
HSL	Health Specialists Limited
HSS	Vanuatu Health Sector Strategy 2010-2016
IDQS	Investment Design Quality Standards (DFAT)
IMR	Infant mortality rate
JICA	Japan International Cooperation Agency
JPA	Joint Partnership Agreement between GOV and DPs
LDP	Leadership and Development Program
M&E	Monitoring and evaluation
MC	Managing Contractor
MDG	Millennium Development Goals
MFEM	Ministry of Finance and Economic Management
MMed	Master of Medicine

MOH	Ministry of Health
MTS	Medical Treatment Scheme, Government of New Zealand
MWSPV	Medical Workforce Support Program (Vanuatu); “the Program”
NCD	Non-communicable disease
NPH	Northern Provincial Hospital
PAA	Vanuatu Priorities and Action Agenda, 2010-2016
PacTAM	Pacific Technical Assistance Mechanism
PCC	Program Coordinating Committee
PGDip	Post-graduate Diploma
PHC	Primary and preventive health care
PIC	Pacific Island country
PIP	Pacific Islands Project (implemented by RACS)
POLHN	Pacific Open Learning Health Network
PPD	Vanuatu-Australia Partnership for Development 2010-2016
RACMA	Royal Australasian College of Medical Administrators
RACS	Royal Australasian College of Surgeons
ROI	Return on investment
SSCSiP	Strengthening Specialised Clinical Services in the Pacific (FNU program)
TCM	Traditional Chinese Medicine
THE	Total health expenditure
TOR	Terms of reference
U5MR	Under-5 mortality rate
UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
UPNG	University of Papua New Guinea
USD	United States dollar
VAT	Value Added Tax
VCH	Vila Central Hospital
VCNE	Vanuatu College of Nursing Education
VHW	Village Health Worker
ViVa	Victoria Vanuatu Physician Project, Canada
VMIP	Vanuatu Medical Internship Program
VPD	Vaccine preventable disease
VUV	Vanuatu Vatu
WHO	World Health Organization

Map of Vanuatu showing provincial composition



Executive summary

Background and program origin

Australia's development assistance to the health sector in Vanuatu currently includes: support for hospital services and medical workforce; village health worker training; malaria and immunisation programs; and systems strengthening activities related to financial and asset management, procurement and health information. This support is provided through a range of modalities, including: a Direct Funding Agreement (DFA; which uses government systems); third party contracts; technical assistance; and contractor-managed projects.

Current support for the medical workforce is provided through in-line medical specialists (to help address essential human resources gaps in the hospital system), visiting medical specialist teams, and scholarship schemes (including for under-graduate and post-graduate medical studies).

In early 2014, the Government of Vanuatu (GOV) requested the Australian Government to provide a further three years of support for the medical workforce, to build on the latest phase of Australian assistance. This will be delivered through the new *Medical Workforce Support Program (Vanuatu)* (MWSPV).¹

Country context

Vanuatu is classified as a lower middle income country. In 2013, it ranked 131 on the United Nations Human Development Index.

Vanuatu was previously thought to be on track to achieve its 2015 Millennium Development Goal (MDG) targets for maternal and child health. However, a recent Demographic and Health Survey suggests that Vanuatu is performing more poorly than had generally been accepted, and is unlikely to meet some of its MDG 4 targets.

Communicable and parasitic diseases remain prevalent, but declines in malaria incidence and a satisfactory tuberculosis treatment success rate suggest Vanuatu may meet its MDG 6 targets. Huge challenges are looming in relation to the growing prevalence of non-communicable diseases, which threaten to consume a large proportion of health resources.

Vanuatu has one of the lowest trained health worker to population densities in the Pacific; overall, there are just 0.19 doctors and 1.58 nurses and midwives per 1,000 population, with shortages in many areas requiring postgraduate training and qualifications. This is further exacerbated by urban-rural inequalities in health work force distribution, and the absence of a clinical or other health services plan based on a costed model of care.

Junior doctor numbers will increase sharply over the next three years with the return of 27 new graduates from medical school in Cuba and six from Fiji. The small, existing medical internship program and systems of clinical governance will need to be strengthened to meet these new demands for entry level medical officer orientation and training.

In March 2015, Severe Tropical Cyclone Pam (Category 5) caused widespread destruction and population displacement throughout the country.

Investment description

The Vision and Goal for MWSPV are summarised in the following Diagram.

The Vision aligns with that of the GOV for an *educated, healthy and wealthy Vanuatu*.

¹ The initial design for the MWSPV was undertaken between April and September 2014. The design was subsequently updated in February-March 2015 to reflect some recommendations of the Australian aid portfolio review in Vanuatu and the emergence of some budgetary constraints.

Vision

A healthy Vanuatu

Goal

The Government of Vanuatu, through the Ministry of Health, maintains and continually strengthens its delivery of clinical health services under the leadership of senior ni-Vanuatu doctors.

To achieve this Goal, the MWSPV will support three broad areas of activity (grouped by output in the diagram on page viii).

The first area of focus is to strengthen **leadership and management capacity** of senior ni-Vanuatu doctors, and related aspects of clinical governance and broader health systems. New knowledge and skills and – in particular – improved clinical systems will contribute to improved patient safety and patient outcomes.

A related stream of activity will help to ensure that **hospital performance systems** (e.g. teaching ward rounds, journal clubs, peer review meetings, death audits, involvement of senior medical staff in analysis of hospital efficiency indicators) and a competency-based medical internship program are in place and adequately supported. Development of clinical systems will include better planning and budgeting for provincial outreach visits from the central level.

The third broad area of focus is to maintain the **supply of international doctors** to fill essential service gaps, and to involve them in capacity strengthening activities for ni-Vanuatu doctors and clinical systems. The Program also marks a three-year transition period during which the level of Australian support for international placements will be progressively wound back – hence the emphasis on the other two focal areas of support.

A critical input of the Program will be the appointment of an outstanding **Senior Clinician Mentor** to guide senior ni-Vanuatu doctors through systems for clinical quality improvement. With the Mentor's guidance, senior Ni-Vanuatu doctors will lead agreed quality improvement initiatives, as well as the recruitment of external specialists to fill critical supply gaps. The overall Program will be guided by periodic inputs from a **Program Director**.

All streams of activity will build on the leadership and management development strategies for senior ni-Vanuatu clinicians that are being implemented under the current program of support. The present Leadership and Development Program (LDP) and Fund and continuing professional development (CPD) arrangements will continue, with a view to CPD becoming a routine medical workforce activity and, increasingly, a Vanuatu Ministry of Health (MOH) responsibility.

Higher order development Outcomes for MWSPV are summarised in the table on page ix.

Aid modality and contracting arrangements

The Program will be managed by a managing contractor (MC), which will be appointed by the Governments of Australia (through the Department of Foreign Affairs and Trade; DFAT) and Vanuatu following an open tender process.

The MC contract will specify monthly payments that, each year, total up to 80% of the agreed annual contract value. A joint annual assessment will potentially trigger additional payment at 10%, 15% or 20% of the agreed annual contract price, subject to specified MC performance criteria.

Program governance and monitoring

Governance will be through a Program Coordinating Committee (PCC), chaired by MOH, with DFAT, senior clinician stakeholders and the MC as members. The PCC will meet twice yearly with regular dialogue between meetings.

A monitoring and evaluation (M&E) plan will be developed collaboratively during a two-month inception phase. Progress will be assessed jointly each year (or more frequently as required, by mutual agreement).

Just over 5% of the indicative budget has been allocated to performance monitoring, progress reporting and interim evaluations. This will include the cost of DFAT engaging an independent reviewer or a small evaluation team at least once during the course of the Program (most likely in Year 2).

Budget and costed inputs

An indicative budget of around AUD 3 million over three years has been drawn up, according to the most likely implementation scenario. The annual allocation scales down from about AUD 1¼ million in Year 1 to just over AUD ¾ million in Year 3.

Costed annual planning will be undertaken collaboratively between partners.

DFAT has agreed that the cost of the leadership training component of the LDP will be met from the bilateral DFA (under the DFA's leadership and management component). The MC and senior medical personnel will collaborate to provide technical inputs into the design and content of LDP activities, addressing jointly agreed outcomes; where appropriate, some of the DFA budget for those activities may also be administered by the MC.

All other aspects of the program – including direct medical CPD activities – will be funded and managed under a MC contract.

The number of long-term, externally recruited specialists – which accrue higher costs in fees and travel – is maintained at three funded full-time specialist positions in Year 1, scaling back to one in Years 2 and 3 in accordance with the recommendations of the Australian aid portfolio review in Vanuatu. Additional flexibility for part time (or locum) specialists is provided in Years 2 and 3; these short-term inputs could be consolidated into a longer term position as required or as recommended by the PCC.

Explanatory notes are included in the indicative budget.²

The successful MC will be encouraged to explore creative, alternative approaches to the use of the available budget, including options for linking constructively with the post-cyclone response to restoring health facility and health workforce functionality.

Risks

Two risks are assessed as more significant in their threat to the Program: that the duration of the MWSPV may be shortened and/or the Program budget reduced; and the impact of Cyclone Pam on the health system, donor budget, health facilities and workforce.

The funding risks may be mitigated by good, ongoing dialogue between the Government partners and the MC (e.g. through the PCC) and a clear mutual understanding that the MWSPV already represents a relatively rapid transition from a high level of donor support for the specialist workforce to a situation of qualified self-sufficiency for GOV and the MOH.

The cyclone represents a more serious risk to health services. It is expected to cause an almost total breakdown in rural health services (affecting local transportation, health facilities, supply chains, immunisation services, water and sanitation, and food security);

² See Annex 7 for likely budget scenarios.

there will be widespread displacement of health workers along with the general population of affected areas. These factors increase the risk of outbreaks of diarrhoea, other water-borne diseases, childhood malnutrition and vaccine-preventable diseases, and resurgence of malaria and other vector-borne diseases over the short, medium and longer term.

It is expected that reconstruction (including of health facilities) will take many years. External support for human resources for health and clinical services development – including under MWSPV – will need to adapt and respond to the impact of the cyclone on the health system.

Outputs and Activities under the Program

Output 1 – Training in leadership and management

Activity 1.A – Professional Leadership Development Program for senior clinicians, providing mentoring and coaching needed to achieve individual plans and access **continuing professional development** (CPD) support from a Leadership and Development Fund

Activity 1.B – Leadership and management learning modules for senior clinicians (Year 2 only)

Output 2 – Systems and incentives to strengthen hospital performance

Activity 2 – Individual and group specialty projects to design and implement key **quality improvement** elements (e.g. teaching ward rounds; journal clubs; peer review meetings; death audits; outreach service planning; updated, competency-based log book and assessments for Vanuatu medical internship program; achievement of teaching accreditation to FNU diploma level).

Output 3 – Continuous medical specialist supply and capacity building


Activity 3.A – Coordination of visiting specialist teams, including maximising teaching and supervision opportunities


Activity 3.B.1 – Develop an actively managed and **costed five-year medical workforce plan** to guide supply decisions for international recruitment and postgraduate training

Activity 3.B.2 – Recruitment, placement and management of **international specialists**, based on five-year medical workforce plan, and including strengthened counterpart processes

Activity 3.C – Assessment of feasibility of **strengthening medical registration**

Activity 3.D – Support for **postgraduate training for clinical nurse specialists** (number subject to workforce plan and available funding)

 = funded from MWSPV budget
(including CPD and incentive funds)

 = funded from DFA, but with MWSPV
input into design and content

Development Outcomes and Program Logic

End of program outcomes

By the end of MWSPV, 80% of senior ni-Vanuatu doctors:

- Independently practise at level.
- Work with others to achieve best practice patient outcomes.
- Lead or participate in risk management and quality improvement programs.
- Lead or participate in ongoing change management.
- Lead or participate in well-designed teaching programs for junior doctors.
- Use resources efficiently.

Immediate / Intermediate outcomes

80% of ni-Vanuatu senior doctors undertake:

- Teaching of junior doctors against a curriculum and log books by mid-Year 1.
- Collaborative daily ward rounds by the end of Year 1.
- Monthly grand rounds by specialty by the end of Year 1.
- Journal Clubs each three months by mid-Year 2.
- Structured peer review meetings monthly, by specialty, by mid-Year 2.
- Well planned outreach services by the end of Year 2.
- Outcome-oriented clinical practice by mid-Year 3.

The essential links to achieve outcomes

- Ni-Vanuatu specialists have awareness, increased skills and knowledge, and motivation to change.
- The MOH and GOV provide an enabling environment for change.

Outputs (coverage targets)

1. 100% of ni-Vanuatu specialists trained in leadership and management.
2. 100% of ni-Vanuatu specialists adopt design and implementation practices related to key elements for strengthened clinical systems.
3. 100% of ni-Vanuatu specialists lead or participate in planning and implementing continuous specialist supply and capacity building opportunities.

Activities (overview; refer diagram, page viii)

1. Integrated leadership and management development programs designed and delivered to meet ni-Vanuatu needs.
2. Individual and group cross-cutting and specialty-specific tasks/projects to design and implement key collaborative elements such as: daily ward rounds, journal clubs, peer review meetings, death audits, outreach service planning, updated medical intern program (based on transparent supervision and log book-based competencies), diploma level teaching accreditation.
3. Annual plans developed and implemented for coordination of visiting medical teams, recruitment of international counterparts to fill critical gaps in the specialist workforce, and the contribution of both to ni-Vanuatu capacity building, by specialty.

1. Introduction and program origin

This document describes the next three years of proposed Australian investment (through the Department of Foreign Affairs and Trade [DFAT]) in the Vanuatu medical workforce, through the *Medical Workforce Support Program (Vanuatu)* (MWSPV), following a request from the Government of Vanuatu (GOV) in 2014. MWSPV is designed as a three-year program that will be funded at an average AUD 1 million *per annum*, as requested and agreed by DFAT.

The Government of Australia has provided bilateral development assistance to the Republic of Vanuatu since 1983, following Vanuatu's independence from Britain and France in 1980. Australia's support to the health sector is guided by a comprehensive, mutually agreed strategy. Support includes direct health budget support, supply of in-line medical specialists to fill gaps to maintain essential clinical services, funding other specialists for specific *ad hoc* clinical services (e.g. visiting individual specialists and surgical teams engaged through the Royal Australasian College of Surgeons [RACS] Pacific Islands Project [PIP]), and a range of health workforce scholarships (including for medical undergraduate and postgraduate studies).

In 2014, GOV requested Australia to provide a further three years of support with the objectives of improving clinical service delivery through strengthening the leadership and management capacity of local clinicians³ and, where necessary, through continued supplementation of the specialist medical workforce. The MWSPV will build on the current DFAT-funded support that has been in place for the last 16 months; this has the same objectives as those identified in the GOV request, and is delivered by a New Zealand based Pacific consulting service, Health Specialists Limited (HSL), through a series of contiguous short-term contracts. Senior ni-Vanuatu doctors have engaged enthusiastically with the current program and are beginning to implement some clinical system strengthening, but want and need a further three years of technical support.

The bilateral framework for the next three years of support is the *Vanuatu-Australia Partnership for Development 2010-2016* (PPD), which has a specific aim to strengthen health services and accelerate progress towards the health Millennium Development Goals (MDG). In turn, the PPD supports key GOV endeavours – the *Priorities and Action Agenda* (PAA) 2010-2016 and the *Vanuatu Health Sector Strategy 2010-2016* (HSS). The HSS is also supported through the *Joint Partnership Arrangement (JPA) between the Government of Vanuatu and Development Partners 2010-2016*, to which Australia is signatory, and through Australian-funded regional programs such RACS-PIP and the Pacific Technical Assistance Mechanism (PacTAM).

Supply of specialist doctors to fill clinical service gaps in Vanuatu was previously funded through PacTAM (from 2006 and prior to that through its predecessor, the Pacific Technical Assistance Facility).

The strategy currently being implemented by HSL aligns with and responds to the findings of a 2011 *Independent Review of PacTAM*, which found that the PACTAM approach to supplying specialist doctors was no longer aligned with 2011 Australian Government policies and approaches on aid effectiveness, including that it was '*...not designed to engender sustained capacity development.*' That review also concluded that capacity substitution (doctor supply) would be needed for the foreseeable future across the Pacific, but that a more systematic and coherent approach to capacity development was also needed, based on mutual agreement.⁴

⁴ *The Pacific Technical Assistance Mechanism (PACTAM). Independent Progress Report.* AusAID, February 2012.

The MWSPV design also responds to the findings and principal recommendations of an independent review of the Australian aid portfolio in Vanuatu, which took place in late 2014 (discussed below, see Section 3.3).

2. Program preparation

The program preparation team visited Vanuatu from 5-19 May 2014.⁵

The approach to investment design was guided by DFAT's Investment Design Quality Standards (IDQS), its monitoring and evaluation (M&E) briefings,⁶ and health systems strengthening experience and the literature. The World Health Organization (WHO) principle of Universal Health Coverage provides the overall conceptual framework for MWSPV.

The design was further informed by reviews, reports and analyses of medical specialist supply in Vanuatu,⁷ thinking and experience on best and most appropriate international practice in resource-limited environments, and the experience of current Australian-funded support. The team consulted extensively among in-country partners and stakeholders, whose input and insights contribute strongly to the present design.⁸ The methodology included analysing options against the IDQS, and examining risks and their implications.

Visits were made to the two key referral hospitals in Vanuatu – Vila Central Hospital (VCH) in the capital, Port Vila, and the Northern Provincial Hospital (NPH) in Luganville – which serve the south and north of the country, respectively.⁹

A debriefing and presentation of an *aide memoire* was held at the Ministry of Health (MOH). This was attended by key DFAT and GOV stakeholders and other development partners (DP).¹⁰ Stakeholders were strongly supportive of the design concepts for the MWSPV that were presented.

The final version of the MWSPV design was completed in September 2014.

The design document was updated in February-March 2015 to reflect recommendations of the Australian aid portfolio review in Vanuatu (Section 3.3), the emergence of some budgetary constraints for the Australian aid program, and the likely effect of Cyclone Pam on the health work force and facilities (Sections 4.1 Geography, climate and environment, 7.7 Risks, and elsewhere).

3. Australian aid program context and support

3.1. Australian policy context

The Australian aid program has been undergoing some refocusing since its absorption into DFAT.¹¹ Australia is placing greater emphasis on broader economic development to build livelihoods, provide jobs and grow economies that can support sustainable communities and lift the most vulnerable people out of poverty.

⁵ Three Program Preparation team members were present in Vanuatu (Gillian Biscoe, Toa Fakakovikaetau and Scott Monteiro); a fourth member (Rob Condon) provided input and advice, as requested, from offshore.

⁶ DFAT (2014) Monitoring and Evaluation Standards 2014 Version. Department of Foreign Affairs and Trade, Canberra, Australia. <http://aid.dfat.gov.au/publications/Pages/dfat-monitoring-evaluation-standards.aspx>.

⁷ See Annex 1 for literature reviewed.

⁸ Not applicable.

⁹ See Map, page iii

¹⁰ See Annex 2 for *Aide Memoire*.

¹¹ www.dfat.gov.au/makediff/Pages/default.aspx.

Its four key avenues for doing this are:

- aid-for-trade;
- better health and education outcomes;
- empowering women and girls;
- leveraging private sector involvement.

Australia is committed to delivering an effective and value-for-money aid program, and spending will be tied to measurable outcomes. New performance benchmarks are being developed to ensure integrity in the aid program and give Australian taxpayers greater confidence in the program's effectiveness in achieving its aims.

Australia is also emphasizing mutual obligations and responsibilities to be met by both bilateral partners, by joint agreement. Consistent with the principles of aid effectiveness and mutual accountability,¹² the MWSPV will be based on:

- GOV leadership and ownership;
- fairness, transparency, openness, accountability and mutual trust in all dealings;
- alignment to the needs and priorities of the people of Vanuatu, with implementation and resource levels tailored to GOV absorptive capacity and performance; and
- collaboration on implementation to ensure efficient and effective use of resources.

3.2. Australian support to the health sector in Vanuatu

Australia is the largest and lead donor in the health sector in Vanuatu.

Direct bilateral inputs into the sector average AUD 4.4 million per year. This funding currently supports: hospital services and medical workforce; village health worker (VHW) training, malaria and immunisation programs; and systems strengthening activities related to financial and asset management, procurement and health information. Support is provided through a range of modalities: a Direct Funding Agreement ([DFA] which uses government systems); third party contracts; technical assistance; and contractor-managed projects.

Current bilateral support for human resources for health (HRH) is mainly directed to providing in-line medical specialists to help address human resources gaps in the hospital system. Funding assistance is also provided for the Vanuatu College of Nursing Education (VCNE) and a new midwifery training program.

The aid portfolio review (Section 3.3) estimated that regional programs provide another AUD 8 million to the health sector in Vanuatu each year, through 15 separate agreements and funding channels. The most prominent regional investments in clinical services and HRH development that benefit Vanuatu include: PIP, under which RACS brings visiting specialist medical teams from Australia and New Zealand to provide in-country services, based on agreed need and priority; and the Strengthening Specialised Clinical Services in the Pacific (SSCSiP) program,¹³ which assists with coordination and policy analysis (including workforce policy). Australia also provides core funding support to the College of Medicine, Nursing and Health Sciences (CMNHS) at Fiji National University (FNU) and the School of Medical and Health Sciences at the University of Papua New Guinea (UPNG); both are significant providers of undergraduate, postgraduate and technical programs for strengthening Vanuatu's health workforce in both supply and capacity.

The Australia-Pacific Technical College has provided mentors for nurse training. Australia also supports other sectors such as transport, and has an active Australian Youth Ambassadors for Development (AYAD) program. This generally includes an AYAD pharmacist based either in the Central Medical Stores at VCH or in the pharmacy at NPH.

¹² These are defined in detail in the *Paris Declaration*, the *Accra Agenda for Action* and the *Cairns Compact*.

¹³ SSCSiP was due to finish in December 2014 but, through a series of extensions, is likely to continue until at least the end of 2015.

Australian support for the GOV's PAA and the HSS has assisted Vanuatu to:

- Reduce malaria incidence by 80% since 2007 to the current (2013) annual parasite incidence (API) of <10 per 1,000.
- Increase:¹⁴
 - births attended by a skilled birth attendant by an additional approximately 2,000
 - measles vaccination by 1,405 children
 - pentavalent (diphtheria, tetanus, pertussis, *Haemophilus influenzae* type b and hepatitis B) vaccination by 1,837.
- Impart knowledge and skills in primary and preventive health care (PHC) to more than 200 volunteer VHWS in some of the country's most remote areas for:
 - nutritional and hygiene counselling
 - basic curative services.
- Reduce procurement costs by up to 40% on some drugs, and by more than 20% (VUV 30 million) on medical supplies overall.
- Maintain supply and quality of clinical services.
- Increase specialist qualifications of doctors, nurses and other members of the health workforce.

3.3. Australian aid portfolio review, 2014

An independent review of the Australian aid portfolio in Vanuatu was undertaken in October-November 2014, i.e. subsequent to completion of the MWSPV design. The review noted the relevance of many Australian-supported activities, but also the highly fragmented nature of the overall bilateral and regional health programs.

Significantly for the MWSPV design, the reviewers thought that Australian health sector support in Vanuatu was skewed towards hospital care (which represented about 31% of the annual Australian health portfolio budget), and recommended a shift in emphasis towards PHC.

Overall, the review recommended the formation of a single Australian-funded program with three main components: primary care (which would be allocated about 60% of the portfolio budget); leadership and management (20%); and hospital services and workforce (20%).

The hospital component would place hospital care within the context of the wider health system, and would include much better analysis of hospital utilisation, efficiency, and quality of service provision. As appropriate, it would also develop the leadership, management and clinical skills of doctors and senior nurses. It was recommended that funding for 'gap-filling' specialists would gradually decrease.

This has reduced the overall funding available to the MWSPV compared with previous levels of support (i.e. through the PacTAM- and HSL-implemented programs). In particular, donor support for internationally recruited medical specialists has been scaled back relatively more quickly than would have been anticipated prior to the review (see also Table 3, page 24).

Under the proposed new Australian-funded program, the hospital component would synergise with the leadership and management component of the broader portfolio – the latter providing high-level capacity building to equip leaders and managers to help ensure that effective and efficient health services are delivered in Vanuatu. Areas of support would include: service quality improvement activities (including the preparation of ni-Vanuatu doctors to assume clinical leadership roles on returning from post-graduate training), financial management, procurement, health information and human resources.

¹⁴ The average annual birth cohort in Vanuatu is about 6,500.

The review also recommended that the overall Australian-funded health portfolio should have clearer mechanisms for demonstrating results.

3.4. Other health sector development partners

Australia is part of the *Joint Partnership Arrangement between Government of Vanuatu and Development Partners 2010-2016*, which supports DP coordination, cooperation and collaboration in the health sector.

Multilateral partners include the United Nations (UN) agencies – WHO, UNICEF, UNFPA, UNDP and the World Bank. The World Bank supports Vanuatu's health sector through GOV and MOH budget preparation, monitoring and expenditure analysis and also provides some public financial management training. WHO manages the Pacific Open Learning Health Network (POLHN; a distance education network for health workers that has facilities in Port Vila and Luganville and is funded by Japan) and provides technical support for health system strengthening and communicable and non-communicable disease (NCD) control. UNICEF has a strong focus on immunisation support and early childhood development, while UNFPA is involved in family planning and commodities security. Many multilateral activities are funded through Australia's regional or bilateral health budgets.

The New Zealand government has provided long-standing support for overseas referrals under its Medical Treatment Scheme (MTS). The French government supported new building and renovations at VCNE and at NPH, including operating theatres. The Chinese government supplies a significant cohort of specialist doctors to Vanuatu every two years (and has done so for nearly two decades). The Japanese government has just handed over a new building at VCH that includes facilities for laboratory, radiology, operating theatre, outpatients department, pharmacy and emergency department. The Cuban government is training ni-Vanuatu medical students through the Latin American Medical School in Cuba (27 candidates across three separate intakes) and supplies three specialist doctors to Vanuatu for part of each year.

4. Vanuatu country context

4.1. Geography, climate and environment

The Republic of Vanuatu is an archipelago of 83 widely scattered mountainous islands of volcanic origin (65 of them inhabited) in the South Pacific Ocean, spanning 1,176 kilometres from north to south.

It is vulnerable to natural disasters and has complex social and cultural systems.

The country has been divided into six provinces since 1994. The names of the provinces are derived from their constituent islands or island groups (refer Map, page iii). From north to south, they are:

- Torba (Torres and Banks Islands).
- Sanma (Santo, Malo)
- Penama (Pentecost, Ambae, Maewo)
- Malampa (Malakula, Ambrym, Paama)
- Shefa (Shepherds group, Efate)
- Tafea (Tanna, Aniwa, Futuna, Erromango, Aneityum)

People without access to land or sea transportation (which may be too expensive for those living outside the cash economy) may need to walk long distances to access health care.

Rainfall averages about 2,360 millimetres per year nation-wide, but ranges from around 2,000 mm in the southern islands (Tafea province) to 4,000 mm in the north (Torba province). The wet season is from November to April, and coincides with peak malaria transmission.

The wet season is also associated with cyclone risk; the greatest frequency is in January and February. Vanuatu receives about between 20 and 30 cyclones each decade, of which three to five may cause severe damage and extensive disruption of services.

In March 2015, Severe Tropical Cyclone Pam (Category 5) caused widespread destruction and population displacement. It is expected that reconstruction (including of health facilities) and economic recovery will take many years.¹⁵ Future support for HRH and clinical services development will need to adapt and respond to the cyclone's impact on the health system.

4.2. Government

Vanuatu became independent from Britain and France in 1980 following a period of colonial administration as a condominium dating from 1906.

There is a unicameral parliament of 52 members elected every four years. The Vanuatu president is elected each five years by a two-thirds majority of parliament. There is a national council of chiefs elected by district councils of chiefs that advises the government on ni-Vanuatu cultural matters.

There have been several changes of government between elections following votes of no confidence or similar, the most recent in May 2014.

In 2012, 17 women contested the national Vanuatu election but none were elected – there are no women in the current parliament. In 2013 parliament decided to increase women's representation to 30%.

4.3. Socio-economic development

Vanuatu is classified as a lower middle-income country with a *per capita* gross national income of USD 3,175 in 2012 and a gross domestic product (GDP) growth of 1.2%. Between 1994 and 2003, real income per person declined by 18% with only slight increases since. There is substantial poverty and hardship and increasing unemployment and urbanisation.

In 2013, Vanuatu ranked 131 on the United Nations Human Development Index, placing it above only Solomon Islands and Papua New Guinea among the countries of the Pacific.

The Goal of the PAA is a just, educated, healthy and wealthy Vanuatu. It includes three strategies. The first is economic growth; the second is a stable investment environment; and the third is raising standards of and access to service delivery, including health services. The next level of priority is a skilled, motivated and gender-balanced workforce. Progress has been constrained by changes in government and policy direction and by economic factors.

The economy is traditionally based on tourism, agriculture and fishing, supported by Vanuatu's financial centre status based on its tax laws. An important economic driver now is construction. China's Export-Import Bank (EXIM) plans investment in major road projects over the next few years. China Aid is funding a large new conference centre in Port Vila.

4.4. Gender equity and child protection

Vanuatu is traditionally male-dominated and is largely a patriarchal society. A 2009/2010 study found 60% of women experienced physical or sexual violence by husbands / partners,

¹⁵ For example, damage caused by Cyclone Evan (2012) was estimated at approximately 30% of Samoa's GDP. Cyclone Pam has caused immediate devastation of Vanuatu's agriculture (for cash income and domestic consumption) and tourism – the country's most important economic sectors.

one in four women experienced violence by non-partners and, of those who experienced violence, for 90% it was severe. Sexual abuse was also high.

Around 50% of the workforce was women in 2006. UN Women has a focus in the Pacific on Advancing Gender Justice, Women's Economic Empowerment, Climate Change and Disaster Risk Resilience. UN Women announced a new initiative in Vanuatu in 2013, the Markets for Change project aimed at strengthening women's economic security and rights.

There is a GOV Department of Women's Affairs and it and DPs conduct awareness raising on domestic violence and other women's rights issues. One role of the Department is to mainstream gender into national policies.

GOV has ratified the UN Convention on the Rights of the Child for which the Department of Women's Affairs has responsibility. In 2009, UNICEF's regional Child Protection Programme supported Vanuatu to strengthen its child protection legislation and systems. In the same year, 612 children presented at hospital in Vanuatu for child abuse-related injury including sexual abuse.

Reporting of domestic violence and child abuse has increased, partly perhaps due to raised awareness. There are police family protection units in four provinces.

Gender issues and children's rights will be integrated into all activities of MWSPV including through the proposed leadership and management development activities, by careful assessment and screening of externally recruited specialists and MWSPV staff and performance monitoring, thorough briefings and orientations, and through M&E. All MWSPV M&E data will be disaggregated by gender and by age where possible.

4.5. Population

Ni-Vanuatu are predominately Melanesian. Bislama (Vanuatu pidgin), English and French are the official languages. There are 105 indigenous languages or dialects and many people are multilingual. In 2010 the national census figures were that 64% of people said they had English language ability, 74% Bislama, 37% French, and 50% spoke local languages or dialects.

The estimated population in 2014 is 262,529. The sex ratio at the 2006 census was 104 males to 100 females. The census also showed that the main religions are Presbyterian (28%), Anglican (15%), Seventh Day Adventist (12%) and Catholic (12%). Emigration rates are low.

The median age of Vanuatu's population is 21 years (i.e. about half of the population is aged 20 years or less); 37.3% of the population is aged 0-14 years, and 5.8% are aged 60 or above.

Despite increasing urbanisation, about 76% of the population still lives in rural areas or on the outer islands. Sixty-six per cent of people live in the northern provinces, mostly in rural or remote locations. There are two urban areas: Port Vila (population 44,039 in 2009) is the capital, and is located in Shefa province; Luganville (population 13,156 in 2010) is in the north on Santo Island.

4.6. Education

There is equal access to schooling for boys and girls and 88% of children are enrolled in primary school; 71% finish primary school and, of these, 79% go on to secondary school. Primary school has been free since 2010.

High school fees are around VUV 20,000 per annum; only one in ten children finish year 12 high school.

There is no university in Vanuatu. There is a satellite law school campus of the University of the South Pacific, a hospitality school, a nursing and now midwifery school (VCNE) and other non-university teaching and learning institutions.

GOV has recently begun a scholarship program for post-school studies (100 candidates per year).

Formal unemployment is high.

4.7. People with disabilities

Vanuatu ratified the Convention on the Rights of People with Disabilities in 2008. In 2013 a building code was ratified to ensure disabled access. The Department of Justice has responsibility for monitoring implementation of the Convention.

A higher level outcome of MWSPV support (i.e. post MWSPV) will be a reduction in preventable, hospital-linked impairment.

4.8. Technology

There is very recent (2014) connection to a new fibre optic cable link which has dramatically increased availability and speed of internet access. There is mobile phone coverage across more than 90% of Vanuatu's population and a high uptake of mobile phone usage. Mobile phones introduce creative new opportunities for health practitioners: in rural and remote areas, birth attendants are said to be using their mobile phones as a torch to support deliveries, while at VCH, some doctors use their mobile phone to take a photo of an X-ray against a window, and email it to offshore colleagues for diagnostic or management input. Links to the internet are restricted through Government Broadband Network (GBN) resulting in limited internet access for doctors for diagnostic and management support.

At VCH the library is used for all talks, meetings presentations; there are no computers in the library but they are available through the POLHN facilities at VCNE (on the VCH site) and at NPH.

As part of a continuous improvement approach during MWSPV, the availability of, and need for, internet access to support clinicians' access to diagnosis and management information will be further explored.

5. Vanuatu health context ¹⁶

5.1. Health indicators

While the reliability of health data in Vanuatu is inconsistent, some indicators appear to be improving. Overall life expectancy at birth in 2010 was 71 years (females 73 and males 69) – up from 62 in 1986.

Other indicators are static or deteriorating. In 2012, GOV appeared to be on track to meet its 2015 targets for MDG 4 (reduce child mortality), MDG 5 (reduce maternal mortality) and MDG 6 (combat HIV/AIDS, malaria and other diseases).

The 2014 Demographic and Health Survey (DHS) found limited decline in infant (IMR) and under-5 mortality rates (U5MR) to 27 and 32 per 1,000 live births, respectively – at least twice as high as expected, with a U5MR the same as in 1999. Neonatal causes account for a majority of infant deaths. Between one-quarter and one-third of children were malnourished, and about one-quarter of children and pregnant women were anaemic. Only

¹⁶ Data are either from the *World Development Index 2012* or World Health Organization's *Human Resources for Health Country Profiles* Republic of Vanuatu 2013 except where otherwise specified.

33% of children aged 12-23 months were fully vaccinated, and 20% of children had received no vaccinations at all; outbreaks of vaccine preventable diseases (VPD) have occurred. This suggests that Vanuatu is performing more poorly than had generally been accepted, and is unlikely to meet its MDG 4 targets.

The maternal mortality ratio is estimated to have halved from 220 per 100,000 live births in 1990 to 110 per 100,000 in 2010. However, low rates of antenatal care and delivery attendance by a skilled provider (unchanged since 2007), low contraceptive prevalence rate among women (38% among all married women aged 15-49 years; 21% among those with low educational attainment) and high rates of teenage marriage may all compromise the rate of further progress in relation to MDG 5. Health worker and wider population displacement and the destruction of facilities as a result of Cyclone Pam are likely to result in poorer access to skilled antenatal, delivery and neonatal care, risking further deterioration in MDG 4- and 5- related health outcomes.

Following an effective malaria elimination program supported by the Global Fund and the Australian government,¹⁷ the malaria API decreased from 198 per 1,000 in 1990 to 74 per 1,000 in 2003, 13.2 per 1,000 in 2012 and 8 per 1,000 in 2013; confirmed deaths from malaria decreased from 22 in 1990 to just one in 2012 (the last recorded). Outbreaks of dengue fever occur periodically.

NCD-related illnesses are increasing and communicable diseases remain prevalent. A 2011 survey found that 55.9% of females and 45.5% of males were overweight and that NCD-related mortality was increasing due to stroke, renal failure, and other diagnoses.¹⁸ Diabetes-related related foot debridement uses around 30% of operating theatre time at VCH. The Ministry of Finance and Economic Management (MFEM) is concerned about the future capacity of Vanuatu to pay for the increasing burden of NCDs.

Sixty four per cent of people in Vanuatu have access to sanitation and 85% have access to safe water. However, poor sanitation and quality of water among rural communities in Vanuatu are a major public health concern and are a cause of diarrhoea and worm infestations.¹⁹ These risks will be magnified by the damage to safe community water supply and sanitation during Cyclone Pam.

The environmental impact of the cyclone is also highly likely to see resurgence in the incidence of malaria and other vector-borne diseases (e.g. dengue, chikungunya), including severe forms requiring referral and hospital treatment. Breakdown in rural health services (destruction of facilities, disruption of supply chains, displacement of health workers along with the rest of the population) means there will be major risks of outbreaks of water-borne diseases (e.g. diarrhoea, leptospirosis) vaccine-preventable diseases (due to breakdowns in immunisation services) and childhood malnutrition (due to the effects of agriculture sector collapse and economic hardship on food security).

5.2. Health system overview

Health service delivery and organisation

Government health services in Vanuatu are delivered through a three-tier system in Vanuatu's six provinces. There is a northern and a southern regional referral hospital (VCH and NPH), health centres (including small district level hospitals in Malampa, Penama, Tafea and Torba provinces), and dispensaries operating at the sub-provincial level.

Community-supported Aid Posts, staffed by VHWs with basic training, provide an informal layer of PHC. The VHW and Aid Post system is formal GOV and MOH policy.

¹⁷ *Eliminating Malaria in Vanuatu*. Asia Pacific Malaria Elimination Network (APMEN). 2013.

¹⁸ *Vanuatu STEPS Report*. 2011. WHO.

¹⁹ *Vanuatu Health Sector Strategy 2010-2016*. *Op. cit.* and includes a range of soil transmitted helminths including nematodes (roundworms) and cestodes (flat/ tapeworms).

The biggest province, Shefa, has the lowest number of health facilities per 1,000 population. Torba has three times as many in order to provide adequate services to small populations dispersed across multiple islands, and three of the six provinces have more than the national average of 1.55 facilities per 1,000 population.²⁰ Traditional medicine is a strong part of Vanuatu's informal private health sector (and is often the first place somebody seeks care).

VCH and NPH provide outpatient and clinical services in the four traditional specialties of surgery, medicine, paediatrics and obstetrics and gynaecology. Sub-specialty surgical services are beginning in Vanuatu – specifically urology – and there is one ni-Vanuatu specialist currently training offshore in orthopaedics.

The Japan International Cooperation Agency (JICA) has just built the new operating theatres and laboratories at VCH (see above).

Outreach visits are an important part of ni-Vanuatu accessing services, but are currently planned in an *ad hoc* way and are weakly budgeted. Part of the strengthening of clinical systems proposed under MWSPV will be strengthened planning and budgeting for provincial level outreach visits; this will assume additional importance with the need to re-establish provincial health services and supervisory outreach from that level to the community.

Where a service is not available at NPH, patients are referred to VCH, and VCH either treats or refers offshore (acutely to Australia or New Zealand, and electively sometimes further afield). Offshore referrals are funded either through the New Zealand MTS or by GOV. As in many Pacific Island countries (PIC), offshore referrals are increasing in Vanuatu: in the three years 2006-2008, 12 patients were referred for overseas treatment but, in 2009, there were 12 patients referred off-shore for the year. Raising awareness of offshore referral criteria and costs has been part of the current Australian-funded support through HSL and this will continue with MWSPV. If treatment is neither available nor feasible offshore then chronic morbidity, functional impairment and premature death become more likely.

There is a health information system (HIS) where data collected provide basic information. The validity and reliability of the HIS is currently being strengthened by a WHO consultant, but routine monitoring of hospital efficiency is not yet possible. Foreign recruited doctors have occasionally started specific data sets to fill gaps, but these are never sustainable (i.e. they cease to function after the individual leaves).

MWSPV will support senior ni-Vanuatu doctors to develop, implement and sustainably manage the strengthening of clinical systems through cross-cutting system change initiatives. This may include: improved facility-based role delineation at all levels; scope of practice guidelines by specialty; peer reviews; clinical audits, including death audits; clinical guidelines and standards; design, delivery and documentation of strengthened medical intern training; collaborative practice including daily ward rounds and grand rounds; journal clubs; and other quality improvement activities as deemed necessary and feasible.

There is no system readiness for hospital or health facility accreditation and there will not be for some years to come, no matter how well MWSPV achieves. There is, however, a newly proposed health services review (August 2014) that, if done well, could provide the foundation for health services planning against which budgets and health workforce planning and development can be prepared. This would be a significant step towards and foundation for health system change and strengthening.

Health service utilisation

GOV has a strong focus on PHC in the HSS.

However, many ni-Vanuatu first access informal treatment through traditional medicine practitioners and then bypass primary care centres for hospital outpatient services. Seeking

²⁰ *Health Service Delivery Profile – Vanuatu. 2012. WHO & MOH.*

direct hospital access is possibly related to the range of services available at hospitals, the perception that staff are better-trained, and the inconsistent services provided at some PHC levels.

Notably, there was a 45% increase in deliveries at VCH from 2006 to 2013 (2,100 to 3,050) with a 20% increase in the just last three years. MOH staff believe that this may be related to community awareness of the increasingly good outcomes for mother and child when delivered at VCH.

Health budget

The MOH budget was VUV 1.6 billion in 2013 and VUV 1.64 billion in 2014, including Australian DFA support. Funds are released bi-monthly.

Total health expenditure (THE) is about 5% of GDP. Since 2004, the proportion of government expenditure on health has decreased and is now less than 10%.

Financial support from donors and DPs heavily underpins the health budget. For 2012, total MOH expenditure was just over VUV 2.4 billion (USD 26.9 million) and, of this, the GOV provided just under two-thirds and development partners just over one-third.

Although GOV requires line ministries to operate within budget, expenditure has exceeded approved budgets every year since 2008, requiring emergency supplementary GOV appropriations and/or donor replenishments for core areas like pharmaceutical supply. When the MOH payroll budget is overspent, money is taken from operational funds (e.g. for PHC and public health programs) as paying staff is the legally mandated priority.²¹ Despite this prioritisation of HRH costs, there is a huge build-up of financial arrears and payroll liabilities (see *Health workforce*, below).

Since mid-2014, the MFEM and the World Bank have supported the MOH to control spending, and the 2015 budget submission was regarded as credible.

The five national and provincial hospitals receive about 50% of THE; Vila Central Hospital absorbs about half of that.

User-charges are not permitted by law but there are 'user donations' for outpatient visits at the hospitals. These have increased from VUV 200 at VCH two years ago to VUV 500 in 2014 and could be regarded as a form of out-of-pocket co-payment.

Many public health programs – notably immunisation and malaria control – are organised vertically and funded mainly by donors.

Health workforce²²

Vanuatu has the one of the lowest doctor- and nurse-to-population ratios in the Pacific (estimates are 0.19 doctors and 1.58 nurses and midwives per 1,000 population) and there is geographical and skill-base mal-distribution between urban, rural and remote communities. Acute health workforce shortages and imbalances are currently addressed in an ad hoc manner. Health worker displacement and the destruction of facilities following the 2015 cyclone are likely to exacerbate distribution inequalities.

There are frequent changes of Health Minister, Director-General (DG) and senior manager positions in the MOH.

There is no clinical or other health services plan based on a costed model of care, on which health services or workforce plans and budget forward estimates could be based. In 2013, GOV embarked on an unfunded major restructuring of the health workforce that would result in an increase of around 70% (from 943 positions to 1,618); however, that is now on hold following further changes of leadership during 2014. Widespread dissatisfaction remains

²¹ For example, operating budgets for PHC were cut by almost 60% in 2013.

²² See Annex 3 for a more extensive discussion on medical and other health workforce issues in Vanuatu.

around staff payments, including for perceived non-payment of salary, for overtime and for retirement entitlements.

There is a nursing student intake of 200 this year, aimed at addressing widespread nursing workforce shortages.

Over the next three years, to 2017, the ni-Vanuatu medical workforce will double with the return of 33 medical graduates currently completing their undergraduate training in Fiji (6) and in Cuba (27).²³ Systems to plan for or provide the necessary clinical experience and supervision for new medical and nursing graduates are at an early stage of development, and the health system has not yet budgeted for the additional salaries.

There is no strategy for future specialist doctor training based on need. By 2017 there will be 14 ni-Vanuatu specialists with Master's (MMed) degrees, 30% of whom are women, and six doctors with Postgraduate Diplomas (PGDip), one of whom is a woman. Up to 17 further ni-Vanuatu doctors would be eligible to commence Master's level specialist training at FNU or UPNG by that time.²⁴

In 2010 public sector recruitment was frozen with a consequent large increase in the number of people on contracts, usually of six months. Where contracts are not renewed contiguously people work without pay – and with dissatisfaction. Contract employment restricts access to education opportunities available to government employees, including scholarships for specialist training. There is no GOV budget capacity to pay retirement entitlements resulting in people of retirement age continuing to work, including in the health sector.

Australian-funded scholarships have been crucial to developing Vanuatu's health workforce. GOV has recently introduced a program of 100 scholarships per year; concurrently, Australia has reduced its scholarship program from 60 to 30 per year. GOV scholarships are said to not include medical undergraduate or postgraduate training, and capacity to pay is sometimes constrained.

The importance of clinicians as leaders is increasingly recognised as an essential feature of high performing healthcare teams, hospitals and other healthcare organisations and health systems.²⁵ It is also increasingly understood that its absence has adverse consequences (including budget overruns, poor team work impacting patients and other staff job satisfaction) with the ultimate and fundamental adverse impact of preventable adverse patient outcomes and unacceptable mortality rates.²⁶

In Vanuatu, there is an inconsistent culture of collaborative, outcome oriented, evidence-based medical practice and few systems to support this approach. Consequently, externally recruited doctors – whether Australian-funded or otherwise – tend to practice their medicine mostly autonomously with few capacity building benefits flowing to ni-Vanuatu counterparts. Junior doctors are not always available to work with or to teach and supervise. Externally recruited doctors share on-call duty with their ni-Vanuatu counterparts (usually with a heavy on-call load).

During the program preparation mission there was no GOV appetite to develop a needs-based national health workforce plan. Under the changed health sector leadership, this is now being encouraged through DPs, and MWSPV will be in a position to contribute medical workforce development thinking and experience to the plan. Fiji's current (DFAT-funded)

²³ The gender balance of the Cuban-based students is thought to be roughly equal. Of the six FNU medical students, four are women and two are men.

²⁴ In 2013, HSL developed an accelerated model that would increase the number of MMed- and PGDip-qualified doctors in Vanuatu to 59 by 2027; however, this model is unfunded, and has not yet been absorbed into a national HRH or medical workforce development plan.

²⁵ Warren OJ, Carnall R. *Medical leadership: why it's important, what is required, and how we develop it.* *Postgrad Med J* 2011;87:27-32.

²⁶ Mid Staffordshire NHS Foundation Trust public inquiry.
www.midstaffspublicinquiry.com/sites/default/files/transcripts/Tuesday_20_September_-_Transcript.pdf.

experience in developing a comprehensive workforce plan may provide useful experience to inform or guide Vanuatu.

MWSPV will be a key strategic intervention for strengthening senior ni-Vanuatu doctors' capacity to lead and manage themselves and their staff, and plan and implement clinical health system strengthening processes and systems.

On current predictions, it may be that Vanuatu will achieve HR self-sufficiency in some medical specialities (but not sub-specialties) over the next five years. The exception will be anaesthesia, where there is only one qualified ni-Vanuatu anaesthetist and a heavy reliance on nurse anaesthetists (trained at UPNG).

China and Cuba also supply medical specialists to Vanuatu, and have done so for the last 16 and 18 years, respectively – around 16 and three each per annum. There are inconsistent approaches to collaborative practice and limited synergy between ni-Vanuatu, Australian, Cuban and Chinese specialists, reducing the potential impact of their collective inputs and the efficient management of medical specialist supply. MWSPV will work to achieve collaborative team-work across all local and international specialist doctors working in the Vanuatu health system. China Aid advised it will have a renewed emphasis on English language skills to overcome some perceived language difficulties.

Health system constraints summarised

In summary, constraints to health system strengthening in Vanuatu include:²⁷

- frequent leadership and system changes;
- under-supply and mal-distribution of doctors and other health workers;
- frequent over-expenditure on recurrent budget, with disproportionate prioritisation of salaries and hospital expenditure;
- inadequate infrastructure;
- inadequate HIS monitoring of patient progress and outcomes;
- weak HR processes and planning;
- low medical management leadership and management capacity;
- process and procedure inefficiencies e.g. accounts payable, recruitment, data collection, procurement;
- vulnerability to natural disasters.

5.3. Health Sector Strategy 2010-2016

The vision of the HSS is an integrated and decentralised health system that promotes an effective, efficient and equitable health service for the good health and general well-being of all people in Vanuatu, with an emphasis on PHC. There are four broad objectives to achieve this:

- improve the health status of the population;
- ensure equitable access to health services at all levels of health services;
- improve the quality of services delivered at all levels;
- promote good management and the effective and efficient use of resources.

The most recent major reform was decentralisation and a controversial clinician management model – this reform is now on hold. Since then, there have been two acting DGs while recruitment is underway for a new, longer-term appointee.

A health services review has been foreshadowed in preparation for developing the next national health strategic plan, including HRH. MWSPV will be well placed to provide useful strategic inputs.

²⁷ *Health Service Delivery Profile – Vanuatu. 2012. Op. cit.*

6. Other key findings

During its in-country consultations, the program preparation team also found:

- Mutual obligations and responsibilities need to be met by both the MWSPV and GOV counterparts if there is to be a satisfactory return on investment; this includes MOH ensuring there are nominated, actively engaged ni-Vanuatu specialist counterparts.
- Leveraging off Australian-funded regional and other relevant regional and bilateral donor activity can create stronger drivers for system change than one small program alone.
- Financial and professional incentives motivate senior ni-Vanuatu clinical specialists to engage with clinical services and clinical system strengthening.
- Sustainable clinical services led by ni-Vanuatu specialist clinicians will require a core body of highly motivated, clinically well trained individuals who have leadership and management capacity and capability: Vanuatu aspires to reach this scenario.
- Filling clinical service delivery gaps by externally recruited specialists maintains clinical services, which is important for patient outcomes, but does not automatically equate to building Vanuatu's specialist services capacity and capability.
- Overseas attachments following Master's level training are an important component of career pathways for ni-Vanuatu clinicians as they:
 - give exposure to internationally relevant practice to build clinical aspirations and competencies towards clinical excellence;
 - allow learning from colleagues on the importance of incorporating leadership and management skills, work and medical ethics, peer reviews, clinical audits and other systems for clinical quality improvement; and
 - build confidence and clinical networks beyond Vanuatu for continuing professional development (CPD) support, advice on techniques for diagnosis and patient management, potentially sourcing essential equipment, and for liaison and planning for visiting clinical teams.

7. The Medical Workforce Support Program (Vanuatu)

7.1. Australian support

Australia has agreed to assist GOV to maintain and strengthen its health services through improved medical workforce capacity development and essential overseas specialist supply for a further three years.

The program will build evidence and lessons for longer-term strategic thinking and planning of the medical and specialised nursing workforce, and will initiate a longer-term strategy to reduce Vanuatu's reliance on internationally contracted medical specialists to fill core, in-line positions.

MWSPV will leverage the recent, transitional period of Australian-funded support and link strategically to other relevant Australian initiatives (for example, AYAD placements, scholarships, and capacity building contributions from PIP teams). Where possible, the Program will engage with other development partner activities (e.g. the New Zealand MTS) and, where appropriate, encourage the inclusion of other expatriate clinical specialists (e.g. from China and Cuba) to support the ni-Vanuatu specialist medical workforce through a more collaborative model of practice.

MWSPV will seek to provide value for money to maximise Australia's return on investment.

The program manager (Section 9, *Aid Modality*) will be encouraged to explore alternative, creative approaches to the use of the available budget, including options for linking

constructively with the post-cyclone response for restoring health service, health facility and health workforce functionality.

7.2. MWSPV design logic overview

The MWSPV design logic follows the general outline shown in Table 1 and is shown in more detail in the diagrams on pages viii and ix.

Table 1: Overview of MWSPV design logic

Vision (Higher Level Outcome)
MWSPV Goal
End-of-Program Outcomes
Immediate and Intermediate Outcomes
Awareness, skills, knowledge and motivation of ni-Vanuatu senior doctors Enabling MOH culture and wider socio-economic context
Outputs
Activities

MWSPV **activities** will produce outputs that are essential to strengthen health services (e.g. clinical standards and their monitoring). The development and implementation of those **outputs** will support and drive behaviour change in senior ni-Vanuatu doctors to sustainably integrate clinical system changes.

The behaviour changes anticipated through MWSPV support are expressed as **outcomes**. The essential links between the MWSPV outputs and the intended outcomes (i.e. the desired behaviour changes) are the motivation, skills and knowledge of the ni-Vanuatu specialists, predicated on there being sufficient enabling factors in the MOH (including the leadership and support of the DG) and in the broader GOV context (including the available health budget).

There are two levels of outcome – the end-of-program outcomes (EOPO), and a combined set of intermediate and immediate outcomes.²⁸ The behaviour changes or outcomes relate only and specifically to the senior ni-Vanuatu doctors and can be disaggregated at the level of individual participants. There may well be other consequent changes with younger doctors and within the broader health team, but this will be an intentional catalytic effect of the focus of MWSPV on behaviour change among the senior ni-Vanuatu doctors – the key stakeholder group – who will lead and manage clinical system strengthening.

7.3. How the MWSPV will contribute to higher level development outcomes

The Vision and Goal for MWSPV are summarised in the following Diagram.

The **Vision** aligns with that of the GOV for “*an educated, healthy and wealthy Vanuatu*”.

²⁸ Combined on the advice of the DFAT M&E expert because of the relatively small scale and scope of the program and its tight focus on the target group (ni-Vanuatu specialists).

Table 2: MWSPV Vision and Goal

Vision
A healthy Vanuatu
Goal
<i>The Government of Vanuatu, through the Ministry of Health, maintains and continually strengthens its delivery of clinical health services under the leadership of senior ni-Vanuatu doctors.</i>

The GOV strategic priorities to achieve its Vision include better basic services. The HSS supports the achievement of the 'health' component of the overall vision. The PAA notes the importance of an efficient and focused health system and the importance of this focus for human resource development. The PAA also notes that the quality of medical services and health care is a major contributor to improved quality of life, and emphasises that curative services must be maintained. The performance indicators for the overall GOV Vision incorporate the three directly health-related MDGs (4, 5 and 6), i.e. related to improvements in infant and child mortality, maternal mortality, skilled birth attendance, immunisation coverage, contraceptive prevalence rate, the incidence of malaria, TB and NCDs, and the contributory aspects of MDG 1 (malnutrition), MDG 7 (water, sanitation and environmental hygiene) and MDG 8 (access to affordable pharmaceuticals).

The contribution of enhanced clinical systems and services through MWSPV support is to the MDG infant, child and maternal mortality indicators, within an overarching and ongoing reduction over time in preventable health service-related impairment and deaths.

The **Goal** defines how stronger clinical leadership and an improved quality of GOV-managed clinical health services will contribute to the overall Vision. The MWSPV aims to strengthen the underlying systems that are essential for achieving this Goal.

The Goal will be achieved through senior ni-Vanuatu doctors':

- increased leadership and management capacity to improve efficiency and effectiveness of health services;
- increased awareness and skills to design and implement cross-cutting and specialty-specific changes to higher order secondary and tertiary health services;
- ensuring specialist supply is maintained, including through externally recruited specialists for critical gaps in core specialty services;
- working collaboratively with colleagues in the interest of best practice patient outcomes;
- passing on knowledge to more junior doctors, and ensuring succession planning to guide doctors returning with postgraduate qualifications into leadership roles;
- measuring and monitoring agreed clinical patient outcomes.

All these factors can be objectively measured at program end against baseline assessments during the two-month inception period (see Section 7.4, below), using mutually agreed measures. Data will be both qualitative and quantitative.

(M&E and data collection are discussed at Section 8, below).

7.4. How the MWSPV will work – the underlying principles

MWSPV will be based on key principles of Australian aid program policies, including mutual responsibilities and obligations.

Operationalising mutual accountability has been described as one of the most challenging principles of the Paris Declaration;^{29,30} however, joint agreement of relevant accountabilities and other principles, (governance, management and M&E arrangements) will be secured during a **two-month inception phase**. These accountabilities will define the responsibilities and obligations of all partners – DFAT, MOH and the managing contractor (MC).

The principles behind the MWSPV include: adherence to Australian Aid Program policy; partnership, synergies and leverage; constructive relationships; return on investment (ROI); alignment with GOV systems; and better health and services focus at all times.³¹

Within these principles, MWSPV will:

- wherever possible and appropriate, recruit Australian-funded specialists for a year or more, enabling relationships and teaching and learning engagement to be established (noting that some short-term placements will be necessary to meet service needs or because of supply issues, e.g. anaesthetists);
- facilitate ni-Vanuatu specialists participating in the recruitment process for their Australian-funded counterparts;
- facilitate ni-Vanuatu counterparts working actively with externally recruited specialists as counterparts;
- rigorously continue the current medical leadership incentive program;
- support a medical culture of continuous learning and quality improvement;³²
- consider support for nurse specialist training where critical to maintaining clinical services (and if budget is sufficient).

The Program will continue key elements of the current Australian support to leverage and maintain momentum for change, and will add other elements in an enhanced programmatic approach. It will have the potential to lay the foundations for a well-planned change management approach to strengthening Vanuatu's health system and services, and the possible development of a national health workforce plan.

MWSPV will be centrally located among the senior clinical work force, and will therefore link to, leverage and contribute to thinking on new relevant initiatives as they emerge. The strengthened clinical systems and processes and the enhanced leadership and management capacity of ni-Vanuatu medical leaders will add value to whole-of-health system discussions and initiatives.

7.5. What the MWSPV will do – Activities and Outputs

MWSPV-supported activities will focus on three output areas:

- **Leadership and Management Capacity;**
- **Hospital Performance Systems;**
- **Supply of International Doctors.**

The activities generating these outputs are summarised diagrammatically on page viii.

An outstanding **Senior Clinician Mentor** and coach will be recruited to support and manage activities contributing to Outputs 1 and 2. This position may be internationally or locally recruited (but, to minimise disruption of the existing senior clinical workforce, is more likely to

²⁹ www.aideffectiveness.org/The_Paris_Principles_Mutual_Accountability.html.

³⁰ Steer, L and Wathne C. *Mutual Accountability at Country Level: Emerging good practice*. Overseas Development Unit. April 2009.

³¹ See Annexes 7 and 8 for a fuller explanation of the principles and their application.

³² For example, lessons emerging from the new, FNU-supported Kiribati Internship Training Program indicate that there are very prominent indirect benefits ("ripple effects") on the health system and the broader health workforce, including reinforcement of systems for continuous learning, CPD and clinical quality improvement. (Condon R. *Kiribati Internship Training Program (including FNU-Managed Support Project): Rapid Review of Progress in Establishing the Program*. HRF, 25 August 2014).

be filled by an internationally recruited specialist in clinical workforce development and systems of clinical governance).³³

The overall Program will be guided by periodic inputs from a **Program Director**.

Output 1 is: 100% of ni-Vanuatu specialists trained in leadership and management.

The senior ni-Vanuatu doctors' readiness for strengthened leadership and management of change appears high. The MWSPV activities are designed to support and accelerate this readiness for change at both individual and organisational levels, to achieve the EOPOs (see Section 7.7).

To achieve this output there are two linked leadership and management development activities, termed Activity 1 Part A and Part B. Both will be supported by the MWSPV Senior Clinician Mentor.

The first (Part A) is mentoring and LDP support for mutually agreed CPD plans. The second (Part B) is an action learning leadership and management development program, specifically designed to meet senior ni-Vanuatu clinicians' needs and delivered in-country through the leadership and management component of the bilateral DFA.

Part A of Activity 1 will be delivered by the MC and continue through the three years of MWSPV. It is based on the current *Professional Leadership Development Program – Vanuatu Medical Staff (the LDP)* delivered by HSL. The final design for the approach in MWSPV will be dependent on the progress of the ni-Vanuatu specialists when MWSPV starts – anticipated in January 2016 but, subject to response to Cyclone Pam and any related extensions granted to HSL, may be as late as mid-2016.

It is intended that the present Leadership and Development Program and Fund and CPD arrangements will continue, but with a view to CPD increasingly becoming a MOH responsibility during the course of the Program (subject to the recommendation of an interim evaluation). The LDP is unique in the Pacific, but the principle of providing incentives for undertaking CPD and changes in practice are applied widely across the world – including in Australia and New Zealand – and reflect Australian aid program thinking on retaining and motivating health workers in Pacific Island country settings.³⁴

To access the CPD fund, each ni-Vanuatu specialist will need to meet jointly agreed capacity building targets. With the support of the Senior Clinician Mentor, each ni-Vanuatu specialist will develop and document an individual three-year CPD plan (i.e. for the period of MWSPV and beyond), with Goals, educational development activities and times lines. They will jointly agree on the mentoring and coaching needed to achieve the plans and will jointly agree the level of CPD support from the Leadership and Development Fund. The purpose of Part A of Activity 1 is similar to current support; i.e. it will:

- ensure that senior clinicians have access to ongoing training and clinical medical education to build on clinical skills, knowledge and networks;
- provide compensation and incentive for additional tasks that are undertaken as part of the building of clinical and system capacity;
- continue to build capacity and capability of non-clinical management skills in jointly agreed special areas of focus.

³³ The TORs for this position will be developed by the Managing Contractor, according to the model of implementation proposed at tender (see Section 11, *Implementation Arrangements*). The key consideration is that they have relevant high level experience, and the personality to inspire the confidence and trust of the senior ni-Vanuatu doctors.

³⁴ Henderson, Lyn and Tulloch, Jim. *Incentives for retaining and motivating health workers in Pacific and Asian countries. Human Resources for Health*. 2008 6:18.

Part B of Activity 1 is an action-learning leadership and management development program tailored to Vanuatu's needs. This activity will be designed in Year 1 and implemented over 10 months in Year 2. It will be delivered by an external provider, expert in action learning³⁵ to accelerate strengthened leadership and management skills and behaviour change.³⁶ Ideally there would be three separate weeks of learning modules which are residential with coaching and mentoring support in between. This best practice approach may need some modification to fit with service delivery needs and budget.³⁷

This activity will be funded under the DFA Leadership and Governance Program. However, MWSPV will have strong inputs into the design and implementation of the training program where medical and other health sector candidates will be participating.

Action learning is a modality that supports and reinforces change theory and accelerates changes in awareness, thinking and attitudes, and is both a foundation and driver for behaviour change. Groups of participants will identify, negotiate, agree, design and develop a project which targets a critical area of need in clinical systems strengthening – whether cross-cutting or specialty-specific – and which has a measureable ROI. ROI may be in improved quality, improved services/care, decreased costs, individual or organisational learning knowledge and skills, or an anticipated major problem resolved. Group work across specialties will be a different way of working for ni-Vanuatu specialists and is designed to support the development of collaborative practice and a medical culture of learning and continuous improvement.

It is expected that the group work will be strongly guided by the areas of focus under Output 2 (see below).

There are a variety of potential options that DFAT may consider to design and deliver the action-learning program. These include the Australian Pacific Technical College in Vanuatu, or private or not-for-profit organisations that are expert in action learning and understand the health sector in PICs and elsewhere, including the Australasian College of Health Service Executives, or FNU (perhaps in collaboration with the Royal Australasian College of Medical Administrators; RACMA) where an outcome could be participants gaining an Associate Fellowship of the College (this might be a motivating Goal for the ni-Vanuatu specialists),³⁸ or through contracting with the RACMA directly. Costs will vary widely depending on the design of the program and the provider.

Output 2 and Activity 2

Output 2 is: 100% of ni-Vanuatu specialists adopt design and implementation practices related to key elements for strengthened clinical and hospital performance systems.

These systems may include (but not be limited to): **teaching ward rounds, journal clubs, peer review meetings, death audits**, involvement of senior medical staff in **analysis of hospital efficiency indicators**).

Development of clinical systems will also include better planning and budgeting for provincial **outreach visits** from the central level. During these visits, the program will also provide

³⁵ For example see www.birmingham.ac.uk/actionlearning or www.stufygs.net/actionlearn.htm or www.actionlearningsets.com/php/news.php?id=4.

³⁶ This will include strategic management, operational management ability, personal awareness, cultural change capacity, decision making, negotiation skills, anticipating and resolving problems etc.

³⁷ The action learning program is likely to include strategic thinking and management, operational management ability, personal awareness, cultural change capacity, decision making, negotiation skills, anticipating and resolving problems, change management etc.

³⁸ RACMA Fellowship rather than Associate Fellowship would not be possible for all ni-Vanuatu clinicians under current RACMA criteria as it requires Australian Medical Council recognition.

technical guidance for provincial health services on conducting their own outreach to larger community centres.

Currently, outreach services to provincial level tend to be *ad hoc* and often undertaken by overseas locum doctors. GOV and MWSPV will jointly provide a provincial travel budget for senior ni-Vanuatu doctor-led outreach services; the MWSPV contribution is costed at AUD 50,000 per annum for each of the three years of the program (subject to annual plans). Mobilisation of Australian funding for outreach services will be dependent on evidence of the need for the specific outreach services (i.e. by specialty), MOH co-contribution, and transparent and timely acquittal. While the MOH budget is constrained, jointly costed annual planning will start the journey of forward planning linked to budgets and the plans being implemented. If there are no matched MOH funds, then there will be no MWSPV program funding for outreach services.

Another key area of support will be the implementation and management of a competency-based **medical internship program** for newly returning, foreign trained medical graduates. This is discussed further under Section 7.6, *Beneficiaries*, below).

For Output 2, the Senior Clinician Mentor will support the identification of essential, critical, cross-cutting clinical system strengthening needs and the accountability for their development, implementation and sustainable management by individual ni-Vanuatu senior clinicians, as well as group work on health system change projects, helping to build a new culture of collaborative work.

All of these activities will build on the leadership and management skills developed under Output 1. They are grounded in behaviour change theory (Annex 4), and recognise that new learnings need to be applied, practised and supported for behaviour change to result.

Activities may be cross-cutting or specialty specific according to identified need and priorities. There will be individual tasks and group tasks. For the individual tasks the mentor and ni-Vanuatu specialist will identify one agreed cross-cutting area critical to strengthening tertiary services by end-Q1, Year 1 and the mentor will provide support.

The group tasks will emerge from the first module of the action learning program in Year 2. The Senior Clinician Mentor and the action-learning provider will jointly agree the support needed for the group tasks. The group tasks are a different type of capacity building to the individual tasks. To expand on the discussions above, working in groups to achieve change is designed to build organisational capacity within Vanuatu's senior medical community based on a culture of team work, mutual trust and continuous learning.

The Senior Clinician Mentor will play a key role in supporting and advising individual work and the work of the groups, including linking them with external experts where needed (e.g. by tele- or video-conference or internet-based interchanges) and coordinating with the providers of the action learning program to support content meeting needs and progress.

Output 3 and Activity 3 (Parts A, B, C, D)

Output 3 is: 100% of ni-Vanuatu specialists lead or participate in planning and implementing continuous specialist supply and capacity building opportunities.

For Output 3, the MWSPV director and senior mentor will provide support and coordination for ni-Vanuatu senior doctors to recruit, lead and manage international specialists at best market rates to fill essential gaps, for documented agreement on mutual expectations and three-monthly discussions, for annual planning and coordination of visiting specialist teams (e.g. with RACS), and for the assessment of possible support for other essential health team training (e.g. nurse anaesthetists) during MWSPV. The director and mentor will also assess the potential for strengthening the Vanuatu medical registration system and the GOV health workforce planning (and provide an updated, costed medical workforce plan based on current projections for the next five years) as possible activities separate to MWSPV.

Key aspects of Activity 3 to achieve this output are a strengthened counterpart model based on mutual accountabilities including mutual professional assessment each three months, and planned capacity building engagement with visiting medical teams (e.g. their leading or participating in a grand round).

Part A of Activity 3 is an annual plan for coordination of visiting specialist teams, jointly agreed internally and with RACS, which leverage the capacity building opportunities inherent in team visits. There will be a formal process (survey, telephone or email follow-up where necessary) of gaining feedback from RACS, the visiting teams and the in-country teams against agreed criteria at the end of each visit for continuous improvement (using tools previously developed by SSCSiP and RACS, where appropriate). Visiting specialist teams will be actively engaged in capacity development and clinical systems strengthening processes which will be coordinated with those of MWSPV. This could include their leading or participating in grand rounds, journal clubs, peer reviews, delivering multi-disciplinary lectures (including in the context of the Vanuatu Medical Internship Program [VMIP]), CPD advice on opportunities offshore and providing diagnostic and treatment support if asked and where possible when they have left Vanuatu.

Part B of Activity 3 is focused on supply. Support for internationally recruited essential medical specialist supply will continue under MWSPV, at non-inflated market rates (but will gradually scale back in line with the recommendations of the recent Australian health portfolio review). The selection of actual specialties to be supported will need to be responsive to priorities emerging in the post-cyclone period, including the recruitment of individuals with experience in post-crisis or post-conflict settings. To strengthen clarity on mutual obligations, mutual counterpart agreements will replace the current service-oriented agreements for foreign doctors.

There will be (i) an updated and costed five-year medical workforce plan developed jointly by the MC and the senior ni-Vanuatu doctors to guide supply decisions for off-shore undergraduate and post-graduate training, externally recruited doctors and strengthened counterpart processes; (ii) ni-Vanuatu specialists actively involved in recruitment of Australian-funded specialists (and, if possible, internationally recruited specialists placed and/or funded by other DPs); and (iii) strengthened counterpart processes.

There will be an early process where the two counterparts (local and externally recruited) discuss and document their agreement on mutual expectations, responsibilities and obligations as each other's counterparts. There will be a mutual evaluation process at least every three months to enable open discussion and adjustments as appropriate. Criteria will include professional conduct and clinical competence. The Senior Clinician Mentor will provide support and guidance to both parties.

Externally recruited specialists will be recruited not only against medical specialty criteria and eligibility for medical registration in Vanuatu but also against criteria of integrity, professional conduct, flexibility, resourcefulness (including, if possible, experience in post-disaster and/or post-conflict and/or reconstruction settings), cultural awareness, gender and social inclusion attitudes and awareness, and child protection matters including police screening. They will be given a thorough induction into Vanuatu's social and cultural mores, the environmental and financial constraints in the practice of medicine in Vanuatu. They will undertake 10-12 hours of Bislama lessons in-country when their contract is more than three months in duration. They will be given support where necessary for the effectiveness of the counterpart relationship by the managing contractor's senior clinician responsible for mentoring and coaching. Their remuneration packages and conditions will mirror those in the last 14 months of support, but may be adjusted for the Australian or New Zealand consumer price index as appropriate.

The possibilities of establishing long-term supportive relationships – irrespective of the length of an individual's contract – will be explored as part of the MC developing the recruitment strategy for external specialists. This would assist not only assist in-country

relationships but also clinical consistency and provide synergy for ongoing system strengthening. A model may be to identify cohorts of specialist doctor practices to supply specialists or to contract with the learned Colleges similar to the arrangement with RACS for PIP.

Part C of Activity 3 is an assessment of the feasibility of strengthening medical registration by the Senior Clinician Mentor, in close consultation with key MOH decision-makers, senior ni-Vanuatu clinicians and stakeholder representatives, and WHO.

Part D of Activity 3 is that in Year 1 of MWSPV an assessment will be made of priority needs for nurse specialists to support tertiary services and the **budget capacity** of MWSPV to support any essential and critical training determined. There **may** be, for example, capacity to support one specialist nurse's anaesthetic training in UPNG, for example.

7.6. Beneficiaries

Primary beneficiaries

The beneficiaries of MWSPV are:

- People needing medical health services in Vanuatu.
 - These beneficiaries include those needing specialised care in Vanuatu in obstetrics and gynaecology, general surgery, paediatrics and internal medicine and some sub-specialty care in urology surgery; those needing sub-specialty care off shore who meet the clinical criteria for referrals; those receiving sub-specialty care from visiting teams; and those needing medical care through outreach services or in PHC environments.
- Ni-Vanuatu senior doctors.
 - The ni-Vanuatu senior doctors are the direct target group and direct beneficiaries of MWSPV. They will acquire and apply new skills and knowledge, establish new networks, ensure eligibility for career advancement and increase intrinsic job satisfaction including because of enhanced patient outcomes.
- The wider Vanuatu health workforce.
 - Other members of the health workforce will benefit indirectly through knowledge and skills gained from clinical system quality improvement such as: grand rounds, collaborative practice with daily teaching ward rounds, multidisciplinary activities, and direct support from ni-Vanuatu senior doctors because of their enhanced leadership and management skills.
- Government of the Republic of Vanuatu.
 - Through improved clinical care service standards for people in Vanuatu and strengthened efficiencies.

MWSPV will also supply externally recruited clinicians when there are critical supply gaps, using an enhanced counterpart model. The basis for this will be increasingly flexible across the three years of the program, which will allow available funding to be used for either short or longer-term placements.

Beneficiaries in the context of the Cyclone Pam response

There will be a strong focus on supporting the health workforce to respond to the disruption caused by Cyclone Pam in March 2015. Specialist inputs and – especially – provincial level outreach visits will support the re-establishment of sub-national health services, referral networks and systems for supervisory outreach. This will benefit health staff working at the provincial and community level, and communities whose health services need restoration.

Foreign trained medical graduates

Clinical supervision of junior doctors, clinical leadership for maintaining and monitoring standards, and systems to ensure patient safety and good outcomes are all core roles for senior doctors.

With the anticipated surge in the number of returning medical graduates, the ability to provide adequate supervision and professional development opportunities through an effective internship program assumes great importance (especially for graduates trained outside the region's traditional medical schools in Fiji and PNG, whose career options need to be protected through appropriate recognition and accreditation of their intern placements). While technical support for review and adaptation of the existing VMIP may be available through FNU, the MWSPV will be well placed to play an effective counterpart role in ensuring supervisors in each discipline are well orientated to the needs of both the interns and FNU.

The 27 returning Cuban-trained interns will have had strong exposure to rural and remote primary health care, which successive GOV Health Ministers and DGs have strongly supported. A specially designed internship program will help them to enter the Vanuatu health system and medical workforce, and their supervision and teaching will be a substantial part of the workload of the senior ni-Vanuatu doctors during MWSPV. The intern program will be developed by ni-Vanuatu senior doctors with MWSPV support in collaboration with FNU, drawing on the current experience in Kiribati and Solomon Islands.

The Kiribati Internship Training Program Support Project, which is implemented by FNU, includes a component of donor funding to assist other PICs that are about to receive foreign trained medical graduates (FTMGs) to review and, where necessary, strengthen and adapt their existing medical internship programs and supervisory arrangements. The rationale for including FNU in the program is to ensure alignment of the curriculum and outcomes with current evidence and emerging Pacific standards on management of the burden of disease in the Pacific, as well as to assist future accreditation of FTMGs who may want to pursue postgraduate training at FNU.

The MWSPV will be a critical entry point in Vanuatu for FNU technical assistance (e.g. to evaluate and advise on strengthening the VMIP) and for absorbing lessons from the Kiribati and Solomon Islands experience of FTMGs entering the local health system.

7.7. Development outcomes – What the MWSPV aims to achieve

Key factors contributing to the success of the MWSPV will include:

- an experienced Senior Clinician Mentor providing support and expertise;
- a visionary Program Director providing strategic and implementation guidance;
- a leadership and management development action-learning program;
- visiting medical teams and externally recruited specialists providing planned and targeted capacity building;
- ni-Vanuatu specialists and senior clinicians managing their time differently to create space for additional quality improvement tasks (e.g. leading grand rounds, peer reviewing colleagues, involvement in analysis of hospital efficiency indicators, and incorporating new evidence from journal club discussions to change practice).

7.8. Risks

The principal risks to successful program implementation and their management are shown at Annex 9.

The risks are presented in five categories: health sector policy and planning context, program theory and performance risks, fiduciary and financial risks, risks related to health products and services, and external risks.

Two risks are assessed as high risk in terms of likelihood and consequences.

The first is the adequacy of the MWSPV budget and duration to achieve sustainable EOPO, particularly if the duration of the program is shortened or the budget reduced for reasons outside the control of the Program or the MC. The risk mitigation strategies include:

- ongoing policy dialogue with MOH and DFAT;
- prioritisation of inputs and activities against best value-for-money (e.g. most cost-effective models of work force development);
- rigorous M&E to demonstrate outcome level achievements; and
- MWSPV synergistically and contiguously leveraging other DFA elements and other concurrent Australian- and DP-funded support programs.

The second major risk is the impact of Cyclone Pam on the health system, donor and GOV budgets, health facilities and workforce. It is not possible to completely elucidate all of the risk mitigation strategies at the present time as they remain subject to the unfolding disaster response. However, strategies likely to be relevant for the duration of the proposed program include:

- ensuring that the Senior Clinician Mentor and international specialists engaged through the Program have experience in post-disaster and/or post-conflict settings;
- ensuring that MWSPV program management is engaged at appropriate levels of DP coordination;
- ensuring that the Program links synergistically with the public health, preventive and primary care response to the disaster, and with capacity development for disability services for patients recovering from trauma sustained during the acute event;
- positioning MWSPV so that it can make a clear contribution to the HRH response to health system reconstruction, including capacity development of provincial clinical leaders and managers and providing support for health workers delivering services to displaced population centres; and
- ensuring that provincial outreach supported through the program has a strong focus on supporting provincial health counterparts to re-establish their own supervisory outreach mechanisms and within-province and national level clinical referral networks.

It is also acknowledged that the available MWSPV budget already forces a relatively rapid transition from historically high levels of Australian support for the specialist workforce to a situation of qualified self-sufficiency for GOV and the MOH.

Table 3 attempts to quantify the magnitude of that transition relative to levels of support provided in the most recent completed year of current Australian support (2014/15 financial year).

Projections to 2017 for the domestic under-graduate, graduate and post-graduate medical workforce are included at Annex 3 and Table A5.1.

Table 3: Comparison of specialist placements, MWSPV Years 1-3 versus latest year of HSL-implemented support

	Current (HSL)		MWSPV	
Category	2014/15	Year 1	Year 2	Year 3
Senior Clinician Mentor	20 days / year	6 months	6 months	4 months
Clinical hospital specialist (FTE)	5	3	1	1
Rural medicine specialist (FTE)	1			
Locum clinical specialist (PTE)	[Uncertain]	4 months	16 months	8 months

Note: Data on locum placements during 2014/15 are incomplete; table can be updated once final data available.

7.9. Child protection, social inclusion, gender equity

MWSPV will integrate Australian aid program policies and approaches on issues such as child protection, social inclusion and gender equity into the clinical systems, processes and services.

The Australian Government's Child Protection Policy is one of zero tolerance and applies to all personnel funded by the Australian Government. The four key elements are zero tolerance of child abuse, recognition of children's interests, sharing responsibility for child protection and a risk management approach. All people contracted by the MC or by DFAT for MWSPV will be assessed for the appropriate character and behaviour traits to meet Australian Government requirements, including screening, and will sign a contractual undertaking to adhere to DFAT's child protection policies and procedures. The MC will monitor compliance including through performance assessments and reviews, observation and audits, and advise DFAT immediately of any concerns.

Other policies to be integrated into how MWSPV conducts its business will include domestic violence, gender equity and social inclusion. These will be included as cross-cutting themes included in the external specialists' induction program and integrated with the learnings through the leadership and management development programs. Outcomes are included in the program logic and change frame below. They will be monitored and evaluated at the annual joint assessment and at the end of MWSPV.

Potential within-Program outcomes are summarised in the diagram below.

Table 4: Cross-cutting themes and related outcomes of the MWSPV

<i>Cross-cutting themes</i>
Child protection screening, gender equity, social inclusion, domestic violence and fraud will be integrated into the leadership and management development programs, individual and group capacity building tasks/projects, the mutual evaluations between ni-Vanuatu specialists and their counterparts, and selection screening of externally recruited specialist counterparts.
<i>Outcomes related to cross-cutting themes</i>
100% of ni-Vanuatu specialists demonstrate they are informed and knowledgeable about cross-cutting themes as evidenced by their integration into: <ul style="list-style-type: none">• The design and implementation of the individual and group capacity building tasks (e.g. planning reflects disability inclusion and access to clinical services).• Their daily clinical and management practices (e.g. communication and mentoring supports gender equity).

8. Monitoring and evaluation

The **M&E framework** will be developed collaboratively during a two months inception phase for MWSPV. This is consistent with the Program principles of partnership and ni-Vanuatu leadership, and with ni-Vanuatu specialists designing, implementing and maintaining changes in higher order clinical services. An appropriately qualified **M&E expert** will assist in this process, and will continue to provide up to four inputs per year for the duration of the Program.

Where possible, indicators and assessment processes will align with existing processes and information, consistent with the principles of aid effectiveness, and will be gender

disaggregated. Where relevant, MDG-related data will be sourced from existing MOH systems and strategies as described in the HSS.

Baseline measures will be developed during the inception phase as part of the M&E development process, including for measures of clinical efficiency and clinical outcomes. The senior clinician mentor will support this and draw on other expertise as needed. Where possible, MWSPV progress will be measured against targets specified in the MOH triennial corporate and annual business plans, building up a picture over time of progress towards the Goal, as well as specific behaviour change assessments (whether directly measured or against proxy measures) towards the outcomes and EOPOs.

A **joint annual review process** will enable ongoing learning and re-alignment during MWSPV. There will be internal annual and end-of-program evaluations, and at least one independent review commissioned and managed by DFAT. There will be a series of evaluation questions developed by the extraction of key data and themes from relevant documents and reports.

The independent review will provide an opportunity to review the medical workforce plan and how MOH, the Program and the medical workforce are responding to the longer-term issues related to Australia scaling back its support for Vanuatu's specialist doctor supply.

Between 5 and 6% of the MWSPV budget will be allocated for M&E. The M&E budget (Annex 7) funds M&E experts, material and financial resources, DFAT-commissioned reviews and monitoring visits, the joint annual assessment and end-of-program evaluation; 20% of Program Director costs are presumed to be related to M&E.

The managing contractor will monitor progress toward achievements against the baseline at mobilization and every three or six months as jointly agreed, and report to the six-monthly Program Coordinating Committee (PCC) meeting (see *Governance*, Section 11). Every effort will be made to minimise the transaction costs of data capture and reporting; MOH systems and processes will be used wherever possible.³⁹

The evaluation component of the annual assessments will build on the framework presented in the tables below and will reflect universally accepted international standards. The joint annual assessment methodology will include extraction of key data from HIS and relevant documents and reports, extraction of key themes and concepts from interviews, observations and discussions, cross-checking of inter-observer views, data and concepts between the team members, and analysing options and examining risks and their implications.

9. MWSPV aid modality

MWSPV is a health systems change program with the senior ni-Vanuatu medical workforce as the technical point of entry and an average annual budget of AUD 1 million.

It has potential to provide a high return on investment. This is because of the broad enthusiasm for health system change and maturation in Vanuatu, the strategic linking of MWSPV to other Australian- and DP managed support, the capitalising of capacity building opportunities through visiting medical teams, the strengthened counterpart model, and the complementarity of senior clinician mentor support and the LFD program.

Aid options considered for MWSPV included direct funding to the MOH to manage the proposed activities, pooled funding with other DPs, multilateral agreements, NGO

³⁹ The MOH HIS has been identified earlier as a constraint to strengthening Vanuatu's health system. The MWSPV may find it needs to adapt to prevailing data acquisition and management circumstances, but should work closely with the WHO HIS adviser to maximise use of available data.

agreements, and a program-based approach. The key considerations in determining the type of aid for MWSPV was the best fit, given its size and focus and value for money.

The option of MOH managing the MWSPV directly was rejected. Australia already provides direct support to Vanuatu's health sector budget. At this time, MOH's internal management processes are not considered robust enough to manage MWSPV. There are no suitable NGOs in Vanuatu to lead MWSPV. Multilateral agreements are neither needed nor warranted, given MWSPV's highly focused scope. Pooled funding was considered but a program approach was considered more appropriate. A program approach gives flexibility, and has proved effective in the current program of Australian-funded support.

A managing contractor will be selected through an open tender. The tender will be for all MWSPV activities, with a separate funding stream for the leadership and development program (as confirmed by DFAT). Arrangements for sourcing and engaging an appropriate provider for the action-learning component would ideally be through the managing contractor to ensure synergies and linkages with other LDP content with the senior mentor's support.

Tenderers will be encouraged to present added value initiatives to this investment design as part of the tender process.

10. Budget and Value for money

10.1. Indicative budget

The indicative MWSPV budget under the most likely implementation scenario is presented at Annex 7.

The budget is based on an average of AUD 1 million per annum. The annual allocation under the envisaged scenario scales down from about AUD 1.25 million in Year 1 to just over AUD 0.75 million in Year 3.

The budget scenario assumes that leadership and management training under the LDP will be funded separately through the DFA (but implemented under program and MC guidance), while CPD and incentive arrangements are included in the direct MWSPV budget (but will scale down as MOH absorbs some of these costs).

Tenderers will be encouraged to explore and present alternatives to this budget scenario as part of the tender process.

10.2. Value for money

Value for money has been a primary consideration in developing the MWSPV. Value for money will underpin decisions on the program's annual and other plans including economy, efficiency and effectiveness considerations, including for any adjustments during implementation.

Leverage will be a key feature of the Program's value for money. MWSPV will leverage regional programs such as the RACS Pacific Islands Program, all specialist clinicians in-country (whether or not funded by Australia), other Australian and DP-funded activities (including the leadership and management training under the LDP program), and the contextual drivers for change through fore-shadowed reviews and any subsequent reforms.

Value for money will also result from the strengthened leadership and engagement of ni-Vanuatu specialists, including their active engagement as counterparts, and their jointly agreeing and evaluating counterpart expectations and obligations. Return on investment is potentially high.

Ultimately, MWSPV will provide value for money by materially contributing to strengthened health services – a priority jointly agreed by GOV and DFAT.

There will be a small MWSPV staff: under the probable budget scenario (Annex 7), this will most likely include the Senior Clinician Mentor, a Program Director / Manager and a locally engaged Coordinator / Administrator.

The number of externally recruited clinical specialists – which accrue the highest proportion of costs – gradually reduces from Year 1 to Year 3, with increasing flexibility for short-term inputs for anaesthetists and other *locum* type appointments to be managed separately or combined into slightly longer placements, as appropriate. Explanatory notes are included in the budget at Annex 7.

11. Implementation arrangements

Governance

The MWSPV governing and key decision-making body will be a Program Coordinating Committee, which will meet twice yearly. The PCC will be chaired by MOH and include senior representatives from DFAT Vanuatu, senior ni-Vanuatu clinician stakeholders and the managing contractor (which will also provide secretariat support).

The PCC terms of reference (TOR) are included at Annex 7.

Mutual obligations

The MOH is responsible for providing safe and effective health services to the people of Vanuatu and will therefore help to ensure that MWSPV is supporting this responsibility.

DFAT Vanuatu is responsible for programming Australian Government assistance, monitoring Australia's inputs and MWSPV progress, and M&E outcomes, within the policy frameworks set by the Australian Government. The possible specifics of their respective mutual obligations are included at Annex 6.

Contracting arrangements

The Governments of Vanuatu and Australia will enter into a subsidiary arrangement of the *Vanuatu-Australia Partnership Development 2010-2016* agreement for MWSPV when agreement is formalised by the two governments.

There will be a competitive and open tender process to engage a managing contractor, managed by DFAT and with GOV participation in decision-making. The MC will have medical management and recruitment experience, including a strong clinical or hospital services management background – both essential for good program and risk management.

The MC will provide MWSPV management, administration and financial management, technical expertise, mentoring, coaching, agreed technical and training inputs and monitoring reports. The MC will work collaboratively with and support key stakeholders, and manage inputs to each MWSPV component (including relevant aspects of the leadership and management training component of the LDP).

The contract between DFAT and the MC will define the roles and agreed mutual responsibilities and obligations of the respective parties. These mutual responsibilities and obligations will include the MWSPV principles articulated above, including meaningful engagement of local skilled stakeholders; flexible recruitment strategies for external specialists to encourage a service orientation and philosophy, professional networking, institutional linkages, and cultural orientation; probationary periods for long-term appointment; and flexible remuneration within the limits of the Australian Adviser Remuneration Framework.

The level and type of CPD support (including incentives or compensation for CPD and capacity building activities) will be agreed with individual ni-Vanuatu specialists against agreed outcomes, outputs or activities and their own individual CPD plans. The payment schedule will be not less than that in the current support (and potentially more if budget constraints permit, given the broadened remit in MWSPV). The total CPD contribution of the MWSPV budget will be capped at AUD 245,000, scaling back from AUD 100,000 in the first year, AUD 80,000 in Year 2 and AUD 60,000 in Year 3; actual disbursements will depend on individual annual plans and budget constraints to the MOH assuming greater responsibility for CPD funding and activities.

The MC will report to DFAT Vanuatu, which will provide management and technical oversight, through the joint governance oversight of the PCC. There will be an inception phase of a maximum of two months given the short overall duration of MWSPV.

As the MOH is the GOV agency responsible for providing safe and efficient secondary and tertiary care services and building a sustainable health workforce for future self-sufficiency, the MC will work closely with and support MOH, help ensure effective collaboration and cooperation between stakeholders, participate in the PCC and provide secretariat services to it, and manage the MWSPV program in compliance with MWSPV principles as presented earlier. The MOH will provide office space for MWSPV, ideally at VCH.

DFAT will determine – with GOV, and also with the successful MC after the tender process – the appropriate strategy to engage a provider to design and deliver the action-learning program under the broader LDP (i.e. for Output 1).

The contract with the MC will provide monthly payments that each year total up to 80% of the agreed annual contract price. The joint annual assessment will trigger additional annual payment at 10%, 15% or 20% of the agreed contract price, subject to contracted performance criteria. LDP payments to the ni-Vanuatu specialists, administered by the MC, will similarly follow this formula against jointly agreed criteria. To access the LDP funds, individuals will need to perform satisfactorily in meeting agreed CPD, capacity building and quality improvement targets.

Just over AUD 44,000 is reserved to allow DFAT Vanuatu to engage external technical assistance to provide independent input to the joint annual MWSPV assessment and at any other time when DFAT deems that independent assessment of progress is required, including technical and managerial advice and support.

A costed five-year medical workforce plan will incorporate modelling of future supply, and will factor in the steady return of medical graduates and post-graduates to Vanuatu; this will help to guide DFAT in the progressive future reduction in international specialists and decisions about an exit strategy.

The Contractor will provide pastoral support, including 24-hour pastoral care and clinical support of locum medical specialists through phone calls and interviews to ensure adequate safety and security measures, performance and clinical backing as necessary. Direct observation in-country of locum medical specialists will occur during approximately bi-monthly supervisory visits from program management staff, including at least one medical adviser capable of assessing locum performance, unless otherwise agreed with DFAT and MOH in writing.

The MC will prepare a Program Completion Report during the final six months of the Program. This will incorporate longer-term thinking on possible strategies for Australian assistance for Vanuatu's health workforce and possible other support to the health sector.

Annex 1: Literature reviewed

Henderson, Lyn and Jim Tulloch. Incentives for retaining and motivating health workers in Pacific and Asian Countries. Human Resources for Health, September 2008.

Hurley, Dermot. The Vanuatu Medical Workforce. The Current Situation and Future Development. 2010

Hurly, Dermot. Vila Central Hospital Medical Workforce Review. 2010.

Pacific Remuneration Review. 2012.

Buchan, Jim. Pacific Recruitment Mechanism Feasibility Study. 2011.

Strengthening Specialist Clinical Services in the Pacific. Program brief. 2012.

Hurly, Dermot. Pacific Medical Risk Management. 2013.

Pacific Technical Assistance Mechanism (PacTAM) Review. 2013.

Rosalind David. The Pacific Technical Assistance Mechanism (PACTAM) Final Independent Progress Report. 2012

Sorenson, Debbie and Seini Jensen. Vanuatu Medical Services Evaluation. 2013.

Health Specialists Limited, Evaluation of the "Specialist Clinical Support Programme" provided through the PACTAM mechanism. Draft (undated).

Health Specialists Limited, Specialist Clinical Workforce Development Plan. 2012

WHO, UNSW. Human Resources for Health Country Profiles – REPUBLIC OF VANUATU

Health Specialists Limited. Professional Leadership Development Programme – Vanuatu Medical Staff

Government of the Republic of Vanuatu. Vanuatu Health Sector Strategy 2010-2016

Australian Government. Department of Foreign Affairs and Trade. Australian Aid website

Government of the Republic of Vanuatu and Australian Government. Australia Vanuatu Partnership Agreement (2010-2016)

Australian Government. Department of Foreign Affairs and Trade. Annual Review of Aid Effectiveness 2012–13. 2014.

Annex 2: Aide Memoire

Background

The Australian Government has supported the Vanuatu health sector since 1983 following independence in 1980. Australia provided AUD41m in Vanuatu in 2012/2014 and some AUD20m regionally in which Vanuatu shared. Australia is the largest and lead donor in the health sector in Vanuatu.

The Australian Government supports the advancement of the *Government of Vanuatu's Priorities and Action Agenda (PAA) 2010-2016* (in which one priority is health) and the *Vanuatu Health Sector Strategy 2010-2016 (HSS)*. There is also a joint partnership agreement between the Vanuatu government, the Australian government and other development partners to support the HSS.

The vision in the HSS is to have an integrated and decentralized health system that promotes an effective, efficient and equitable health services for the good health and general well being of all people in Vanuatu. There are four broad objectives to achieve this:

- Improve the health status of the population.
- Ensure equitable access to health services at all levels of health services.
- Improve the quality of services delivered at all levels.
- Promote good management and the effective and efficient use of resources.

This approach recognizes that a strong health system requires interdependent and excellent primary and tertiary services underpinned by well-judged referrals and population health initiatives.

Australia's recent support has assisted Vanuatu to:

- Reduce malaria by 80% since 2007 to the current incidence of <1%.
- Increase:
 - Births attended by a skilled birth attendant by an additional approximately 2,000.
 - Measles vaccination by 1,405 children.
 - Pentavalent vaccine by 1,837.
- Impart knowledge and skills to the more than 200 volunteer primary health care workers across the six provinces for:
 - Nutritional and hygiene counseling.
 - Basic curative services to the country's most remote areas.
- Reduce procurement costs by up to 40% on some drugs and more than 20% (VT30m) on medical supplies overall.
- Maintain tertiary clinical services.
- Increase specialist qualifications of doctors, nurses and other members of the health workforce.

Australia previously provided in-line medical specialist support - for 17 years. Now that the number of ni-Vanuatu clinical specialists has increased, this support is changing as they take leadership of tertiary services.

Government of Vanuatu (GoV) Request to Government of Australia (GoA)

The Government of Vanuatu has requested continuing support from the Government of Australia (GoA) for its tertiary health services for the next three years. GoV and GoA agreed that the objectives of this new Tertiary Health Care Program (THCP) are:

1. Local clinical service delivery capacity at tertiary level through workforce supplementation when necessary.
2. Leadership and management capacity of local clinicians.

A longer-term aim is that Vanuatu is self-sufficient in clinical specialist workforce supply to assure the quantity and quality of tertiary services needed.

The Program will be for three years and will be tendered.

Consultation process

There was an in-country Program Preparation mission (the team) from 5-19 May 2014. The team was Gillian Biscoe and Dr. Toa Fakakovikaetau with the third member (Dr Rob Condon) offshore and providing input by phone, email and Skype.

The team analysed a range of documents and consulted widely in Vanuatu and also consulted relevant people elsewhere in the Pacific, in Australia and in New Zealand. The team analysed health data trends and medical workforce trends and projections.

Observations and key findings

Funding

GDP has increased in the last two years but per capita income has decreased due to population growth. Government services consume 20% of the GDP.

Health expenditure in 2012 as percentage of GDP was 5.3% and per capita health expenditure was VUV157.30. The health sector budget increased slightly over the last two years. MoF releases funds monthly to MoH on a bi-monthly warranty. If the payroll budget is overspent then money is taken from the operational budget. It has been challenging for the health system to stay within budget. There are increasing health user donations for services.

Health Statistics

The validity and reliability of data in Vanuatu is inconsistent but indications are that some health indicators are improving. Others are either static or deteriorating.

Vanuatu is on track to meet millennium development Goals (MDGs) 4 (reduce child mortality) and 5 (combat HIV/AIDS, malaria and other diseases). World Bank figures from 2012 show:

- Life expectancy in 2010 was 71, up from 62 in 1986.
- Infant mortality rates (IMR) had declined to 12 per 1000 live births in 2010, from 47.4 deaths in 1980.
- Under-five deaths were 13.9 in 2010 down from 61.6 per 1000 live births in 1980.

At VCH:

- Perinatal mortality was 23/1000 in 2013.
- The number of deliveries at VCH increased by 45% from 2006 to 2013 (2,100 to 3,050), and 20% in the last three years.
- Annual operations are around 5,000.

NCD-related illnesses are increasing and communicable diseases remain prevalent. A high proportion of surgical cases are said to be either diabetic sepsis related (perhaps 25%) or trauma-related (accidents including burns and fractures).

Health Structure

Decentralization will increase the number of people on the health payroll from 943 to 1618. Some senior clinicians are now in senior management position.

Medical workforce

Vanuatu is doing well in developing a ni-Vanuatu medical workforce. Since 2009 the number of masters-prepared specialist clinicians has increased from two to six, a tripling of supply. By 2017, with Australian funding, there will be **15 Masters-prepared ni-Vanuatu specialist clinicians**. There could also be **17 eligible to commence their Masters during the next 3 years**. Projected workforce supply is in the table below.

	2014=	2017	Predicted supply needs 2026*
Masters level	6	15	58#
Other experienced doctors	5	5	
Masters Training	9	Could be up to 17 eligible	
Diploma level	6	6	
Registrar	8	11	
Interns	3	33	
Medical students	7 FNU 27 Cuba	2 graduate in 2015; 4 in 2016; 1 in 2019 17 graduate in 2015; 10 in 2016	

* Vanuatu Specialist Clinical Workforce Development Plan was developed by ni-Vanuatu specialist clinicians supported by HSL; it is not formally endorsed by MoH, the PSC or MoF; it is uncoded and does not include relationships to projected activity and services

Includes additional specialties of Psychiatry, Pathology, Radiology

~ In 2014 one Masters level doctor is in full time senior policy position and no longer does clinical work

+ In 2014 six diploma level doctors are in senior management positions; five do part time clinical work including on-call; one is full time in senior management

= In 2014 there are 8 specialist doctors from China in Santos and 6 in VCH. 3 specialist doctors from Cuba are expected in 2015.

Health workforce team

Tertiary services need a multidisciplinary team for their effective delivery. There has traditionally been a strong nursing workforce in Vanuatu including midwives, nurse practitioners, nurse anaesthetists (now known as anaesthetic scientific officers {ASO}), and a range of nurses delivering services at tertiary and primary health care levels. Nurse workforce supply is now also problematic, however. The current response is that two hundred student nurses will commence studies in July 2014, 100 each in the south and north.

Australia is supporting a new formalized midwifery program with an intake of 14 midwife students this year.

There are a range of other health workforce needs to be able to deliver strong tertiary services. As well as the medical workforce supply Australia is also currently funding one bachelor of nursing student, four bachelors of medical imaging science, three bachelors of medical laboratory science, one bachelor of dental surgery, and one diploma of dental technology.

Other key findings

Other key findings include that:

- Sustainable tertiary services led by ni-Vanuatu specialist clinicians requires there be sufficient numbers, trained well.
- Filling clinical service delivery gaps maintains services, which is important, but does not equate to building Vanuatu's specialist services capacity and capability.
- Overseas attachments are important as they:
 - Give exposure to international best practice to build clinical aspirations and competencies towards clinical excellence.
 - Allow learning from colleagues on the importance of incorporating leadership and management skills.
 - Expose ni-Vanuatu clinicians to international best-practice work and clinical ethics, and clinical governance processes and procedures (such as peer reviews, clinical audits, team and collaborative medical practice).
 - Build confidence and clinical networks beyond Vanuatu for continuous professional development support including for diagnosis and treatment, for potentially sourcing essential equipment, and for liaison and planning for visiting clinical teams.
- Different clinical specialties in Vanuatu are at different levels of progress in their medical specialist supply and in how they co-ordinate, collaborate, supervise, teach and peer review their medical practice.
- Leveraging off Australian-funded regional and other regional and bilateral donor activity can create stronger synergies for lasting improvement than staying within a 'specialist-supply model' only.
- There are mutual obligations and responsibilities which need to be met by both GoA and GoV if there is to be a return on investment satisfactory to both; this includes actively engaged counterparts.

Key features of Australia's support in the next three years

We propose that doing things differently in the last 14 months continues and strengthens. At the end of three years we see that ni-Vanuatu specialists should not only be leading Vanuatu's tertiary sector to clinical excellence, but that there will be evidence of this through peer reviews, clinical audits, an excellent intern program, and outstanding supervision and teaching by ni-Vanuatu specialists of interns, registrars and in-country diploma and masters student, with the collaborative support of Australian-funded specialist. We see that some ni-Vanuatu senior specialists could be accredited for diploma and masters level supervision by the end of 2017. We see that patient data should reflect this system-wide achievement of clinical excellence.

And so we have a proposed *program Goal* and *objectives*.

Program Goal

Raised standards of health service delivery (GoV Priority Action Agenda 2006-2015 and MoH Health Sector Strategy 2010-2016) through ni-Vanuatu medical specialists leadership.

Objectives

1. Support continuous availability of agreed tertiary clinical services.
2. Support ni-Vanuatu senior-level specialist supervision and teaching competencies.

3. Support clinical systems such as peer reviews, clinical audits, clinical protocols and guidelines, and an effective intern program.
4. Support leadership and management development of senior medical managers and heads of departments.

The partnership approach of the GoV and GoA in the next three years will have a strong focus on mutual obligation. Subject to funding constraints and any changes in Vanuatu's health system, we propose that the next three years support include:

- Ni-Vanuatu specialists as part of the recruitment process for their Australian-funded counterparts.
- Australian-funded specialists recruited wherever possible for a year or more, enabling relationships and teaching and learning engagement to be established, recognizing some short term placements will be required to meet service needs.
- Actively engaged ni-Vanuatu counterparts.
- Continuation and strengthening the current leadership incentive program.
- Support for a medical culture of continuous learning and improvement.
- Coordination and synergies with other tertiary services support.
- Exploring options for further leadership and management development support.
- Considering support for nurse specialist roles where critical to maintaining tertiary service.
- Developing a process between ni-Vanuatu and the visiting specialists to discuss and agree clinical services and professional development expectations and mutual obligations, whether for short-term or longer-term engagements, with follow-up discussions, say, each three to six months.
- We think that by the end of 2017 Vanuatu could have consistently across all specialities at both referral hospitals:
 - *A structured team approach to managing patients.*
 - *Outcome orientated clinical practice.*
 - *Evidence-based practice with good local data.*
 - *Regular with international peers or professional bodies.*
 - *Regular and structured clinical peer review meetings.*
 - *Specialist supervision of more junior clinicians and performance feedback.*
 - *Scope of practice parameters guide clinical work.*
 - *Self-directed professional learning for maintenance of clinical competency standards.*
 - *Rotating intern(s) in the discipline with supervision and log book documentation.*
 - *Specialist competencies are maintained or strengthened.*
 - *Diploma studies supervised and achieved in-country.*

Annex 3: Vanuatu medical workforce supply

Supply

The Australian Government has supplied in-line, externally recruited clinical specialists to Vanuatu almost since it began its support to Vanuatu in 1983. The size of the ni-Vanuatu medical workforce is steadily increasing, and reliance on external support is expected to start to reduce from 2015.

From 2014 to 2017, the ni-Vanuatu medical workforce will double with the return of 33 medical interns currently completing undergraduate training in Fiji and in Cuba, bringing the total number of ni-Vanuatu doctors to 70. The gender balance of the Cuban-based students is thought to be roughly equal. Of the six FNU medical students, four are women and two are men.

Specialist medical training at Diploma and Master's levels for ni-Vanuatu candidates is either through the College of Medicine, Nursing and Health Sciences at FNU or UPNG. There are currently five Master's-level and seven Diploma-level specialists in Vanuatu. By 2017 there will be 14 ni-Vanuatu specialist consultants with Master's degrees (30% of whom are women) and six doctors with Diplomas (one of whom is a woman). Recent analysis anticipates self-sufficiency in ni-Vanuatu medical specialists by 2026 based on current trends to reach 58 master's level specialists in eight clinical areas;⁴⁰ however, it should be noted that this analysis is un-costed, assumes current trends will continue, and does not form part of an overall HRH master plan linked to an agreed national model of service provision.

Since 2009 the number of Master's-qualified ni-Vanuatu specialist clinicians increased from two to six, a tripling of supply. By 2017, not only will there be the 14 Master's-qualified ni-Vanuatu specialist clinicians,⁴¹ there could also be 17 eligible to commence their Master's-level education during the next three years. As noted above, in the absence of a formal health workforce development plan there are no known GOV plans at the moment for new starts in specialist medical training.

National health workforce requirements

A comprehensive national health workforce development plan should be transparently linked to health and service needs, and budgeted, and integrated with a whole-of-sector workforce perspective, workforce substitution possibilities and a formal capacity building and training agenda.

The new health sector leadership has foreshadowed their interest in a health services review and the development of such a health workforce plan. If so, the opportunity should be seized and Australia may consider funding support being drawn from the DFA.

Australian support

Australian scholarship support has been crucial to development of the ni-Vanuatu medical supply. In addition, Australian funding of in-line clinical specialists has not only enabled higher order secondary and some tertiary services to be maintained but has also been created space for ni-Vanuatu specialist candidates to complete their studies and/or post-graduate CPD off-shore. Over the years many of these Australian-funded specialists have continued to contribute to Vanuatu's medical workforce development by providing links to

⁴¹ A fifteenth specialist, an anaesthetist, will graduate in 2018.

Australasian and other Professional and Learned Colleges, to training opportunities elsewhere, and to diagnostic and patient management support from offshore.

Projected medical workforce supply

The *Specialist Clinical Workforce Development Plan* projections of the supply of ni-Vanuatu doctors in the next three years is at Table 1 below; the predicted supply needs in 2026 are shown in the right-hand column (noting their limitations, discussed above).

Table A5.1: Projected medical workforce supply

	2014 ^a	2017	Predicted supply needs 2026 ^b
Masters level	6	14 ^c	58 ^d
Other experienced doctors	5	5	
Masters training^e	9	Could be up to 17 eligible.	
Diploma level^f	6	6	
Registrar	8	11	
Interns	3	32	
Medical students	6 FNU 27 Cuba	2 graduate in 2015 and 3 in 2016, and 1 in 2019. 17 graduate in 2015, 10 in 2016.	

Notes:

^a In 2014 there are 8 specialist doctors from China in Santo (NDH) and 6 in VCH. Three specialist doctors from Cuba are expected in 2015, replacing the three who have left in 2014 or are about to leave.

^b *Vanuatu Specialist Clinical Workforce Development Plan* developed collaboratively with HSL and ni-Vanuatu specialist clinicians, as discussed above.

^c An anaesthetist will graduate in 2018.

^d Includes additional specialties of Psychiatry, Pathology, Radiology.

^e In 2014 one masters level doctor is in full time senior policy position and no longer does clinical work.

^f In 2014 six diploma level doctors are in senior management positions; five do part time clinical work including on-call; one is full time in senior management.

Vanuatu's specialist medical workforce is relatively young and spread unevenly through a range of disciplines: surgery, medicine, obstetrics and gynaecology, paediatrics, anaesthesia, ophthalmology and radiology. Sub-specialty interests are developing in surgery (e.g. orthopaedics and urology). There are also differences in how specialties co-ordinate, collaborate, supervise, teach and peer review their medical practice and act as counterparts with externally recruited medical specialists. This last point on counterparts sometimes relates to whether or not there is a critical mass of ni-Vanuatu specialists (but not always).

Currently, only two ni-Vanuatu specialists are working permanently overseas, reflecting the low level of emigration from Vanuatu. There are other developments that may skew future medical supply in Vanuatu: FNU and the Umanand Prasad School of Medicine (UPSM; a private faculty of the University of Fiji in Lautoka) are collectively producing more Fijian doctors than can be employed in Fiji, while there is some uncertainty whether Solomon Islands will be able to absorb all of the more than 100 Cuban-trained medical graduates who

will return over the next five years; in the absence of a costed health workforce development plan, it is also uncertain whether Vanuatu itself may be able to absorb all of its own returning interns. Subject to the availability of internship positions and registration requirements, this may create the potential for competitive regional movement in the medical workforce across the Pacific.

Ni-Vanuatu specialists and counterparts

The aim of the counterpart approach, newly introduced over 2013-2014 under the present program, is the transfer of skills and knowledge to assist ni-Vanuatu specialists to develop or consolidate their skills and confidence to work competently and confidently without a counterpart. HSL briefs the externally recruited clinical specialists on their counterpart capacity-building responsibilities but, as they do not always have a regular counterpart with whom to engage, capacity building opportunities can be limited. In some specialties, small numbers of qualified specialists means that a lack of counterparts is inevitable – for example in paediatrics where there are no ni-Vanuatu specialists – and the model is similar to the clinical supervision of more junior doctors (and nurses). A practical (rostering) challenge is that the ni-Vanuatu specialist and their externally recruited counterpart often being on alternative weekly call. Daily collaborative ward round would address this, and options will be developed and tested through MWSPV support.

Many externally recruited specialists have short-term contracts, an inevitable outcome of HSL's short-term contracts over the current period of support. Longer contracts would help to build relationships and support more consistent approaches to clinical practice and system strengthening. System strengthening activities need to be thought through, designed well and implemented well. Currently there are ad hoc initiatives some led by externally recruited specialists such as stand-alone, ward-specific data collections. MWSPV support will enable more strategic, genuinely system strengthening approaches and other essential elements for strengthening secondary and appropriate tertiary level services as discussed in the main document (for example, collaborative team approach to managing patients, strengthened efforts towards evidence-based practice with good local data, structured peer review meetings, grand rounds and other clinical systems strengthening elements).

Language can also be problematic. Specialist doctors recruited from the Solomon Islands, for example, speak English and a Melanesian *pijin* language similar to Bislama and do not have problems communicating with patient and with staff. Those recruited from, say, Australia and New Zealand, do not usually speak Bislama or French, and only 64% of people in Vanuatu speak English. The nurses and patients' relatives translate where possible. Given that Bislama is the dominant language, and is said to be neither difficult nor expensive to learn, 10-12 hours of Bislama language lessons is proposed as part of the induction program for externally recruited specialists in MWSPV, where their contract period is greater than three months.

China and Cuba specialist supply

China (GOPRC) and Cuba supply medical specialists to Vanuatu. There are inconsistent approaches to collaborative practice and limited synergy between ni-Vanuatu, Australian, Cuban and Chinese specialists, reducing the potential impact of their collective inputs and the efficient management of medical specialist supply.

China provides a significant number of Vanuatu's clinical specialist workforce through its supply of two Chinese specialist medical teams each two years to the north and south of Vanuatu. It has done this for the last 16 and 18 years respectively. For the last two years the GOPRC-funded team in Santo has been two dentists, two physicians, one obstetrics and gynaecology specialist, one paediatrician and one traditional Chinese medicine (TCM) doctor. In the next team, due later in 2014, a surgeon with orthopaedic experience will replace the TCM doctor. In Port Vila, GOPRC currently supplies a dentist, a physician,

surgeon, anaesthetist, acupuncturist and a midwife. China also donates some equipment although has recently stopped donating Chinese medicine due to local challenges with labelling and use.

All people in China have English lessons during their school years and at university, and the Chinese doctors who come to Vanuatu do a further three months of intensive English language training. Their communication skills vary as does their confidence in exercising their English language skills. This has been a barrier to in-country collaborative practice for some. China Aid advises that there will be stronger emphasis on English language training prior to the next medical teams' deployment from China. In Africa, similar teams of Chinese doctors are encouraged to give reports, lectures and do patient presentations. In some African countries they are also assigned a registered nurse as a professional support person or 'clinical buddy'.⁴² There may be merit in exploring similar approaches in Vanuatu to maximise impact.

Cuba supplies three medical specialists for part of each year. The current contingent is preparing to leave and three more doctors (specialties unknown) are anticipated in 2015.⁴³

Bringing the Chinese and Cuban specialists into the mix of MWSPV for stronger engagement in collaborative practice, peer reviews and grand rounds would contribute to MWSPV's impact.

Interns

There are six ni-Vanuatu medical students currently studying at FNU and 27 in Cuba (see Table 1 above). Seventeen of the Cuban-based students are expected to graduate in 2015 and 10 in 2016, assuming the students reach the graduation standards required by Cuban universities on time. Undergraduate medical training in Cuba differs from that at FNU or UPNG in a number of ways: the training relates to Cuba's burden of disease which differs from that of Vanuatu and the Pacific (e.g. there is a much lower burden of tuberculosis, and malaria is rarely seen); and there is less opportunity for acquiring practical skills (e.g. assisting normal delivery, undertaking simple procedures or uncomplicated minor surgery).⁴⁴ It is expected that some modification of intern training and support will be required based on assessment on graduation and on return to Vanuatu. Kiribati has just welcomed back its first cohort of Cuban-trained medical graduates and, in preparation, has developed a specially designed internship program with FNU and WHO support. The experience in South Africa has been similar.

In Vanuatu, there has been some early consideration of FNU input to adjust the existing Vanuatu Medical Internship Program (VMIP; a two-year program designed to meet the intern training needs of FNU graduates) so that it is more able to meet the needs of Cuban-trained medical graduates as they enter the Vanuatu workforce and clinical context. The large increase in the number of medical graduates returning to Vanuatu will stretch the capacity of Vanuatu's health system to provide the required senior clinical supervision and overall clinical placements – compounded by a new GOV strategy to train 200 new student nurses from July 2014 who also will need clinical experience.

There are also volunteer and faith-based initiatives in Vanuatu related to medical workforce supply including the Victoria Vanuatu (ViVa) Physician Project of Canada which has been supplying a general practitioner service to Lenakel Hospital on Tanna and occasionally other

⁴² Personal communication from China Aid official in Vanuatu during Program Preparation mission.

⁴³ Personal communication from the MoH Director-General.

⁴⁴ WHO, SPC. *Health Workforce Development in the Pacific*. Discussion Paper 10, Tenth Pacific Health Ministers Meeting, 2-4 July 2013, Apia, Samoa.

rural/ remote areas of Vanuatu for many years.⁴⁵ This model of a direct long-term relationship for medical supply may generate lessons for MWSPV support. For example, discussions during the MWSPV preparation mission included the possibility of contracting with a cohort of specialists, say a large group practice of anaesthetists or a coalition of anaesthetic practices, to seamlessly supply specialist anaesthetists to Vanuatu throughout MWSPV. In this way counterpart relationships and continuity of clinical approaches could be built.

Medical registration in Vanuatu is through a Board chaired by the Minister of the day and the secretariat is the Director-General. In many other jurisdictions, the practice is to move health workforce registration boards towards greater independence with a legislative requirement to assure the community's safety through safe practice of doctors and other health professionals. An assessment of the feasibility of strengthening the current medical registration model is included in MWSPV. During program preparation there was no interest at senior levels to go further than this, nor is MWSPV resourced to go further. However, the feasibility study would be a valuable input to the proposed collaborative health system review and possible WHO involvement in taking regulatory change forward.

Other disciplines within the health team

As well as specialist doctors and junior doctors-in-training, tertiary services need a multidisciplinary team for their effective delivery. Nurses play an important part in maintaining delivery of Vanuatu's tertiary health services.

There has traditionally been a strong nursing workforce in Vanuatu including nurse practitioners, nurse anaesthetists (now known as Anaesthetic Scientific Officers [ASO]), and a range of other nursing skills at tertiary and PHC levels.

There is a heavy reliance on nurse anaesthetists and ASOs to maintain surgical services, given there is only one medically qualified ni-Vanuatu anaesthetist. At VCH, of the three nurse anaesthetists, two are at retiring age and there is no workforce plan for replacement. At NPH, a recently returned UPNG-trained ASO carries the bulk of the anaesthetic work load. There is a recently-opened two-bed critical care unit at VCH; there is one-respirator, but no nurses trained in critical care (although ASOs would have some applicable respiratory management skills).

There is a small cohort of locally trained advanced nurse practitioners to lead clinical care in rural and remote areas.

Within the limited budget of MWSPV, some multidisciplinary workforce training based on agreed priorities may be possible. This might be a one-year UPNG ASO training for an experienced nurse, for example.

About ten years ago Vanuatu stopped training nurses for 4-5 years, contributing to a skewed age profile in the nursing workforce. In 2007 48% of nurses were over 45 years of age in a system where the compulsory retirement age is 55. Despite steady intakes in recent years of 25-30 nursing students per annum, nurse workforce supply remains problematic. The GoV response of two hundred student nurses commencing studies in July 2014, 100 each in the south and north, together with the intern cohorts, will stretch the health system's capacity - classrooms, clinical placements, teaching and supervising availability. The 14 midwifery students Australia is supporting from mid-2014 will also need clinical teaching and placements.

Australia is currently providing scholarships for one Bachelor of Nursing student, four Bachelors of Medical Imaging Science, three Bachelors of Medical Laboratory Science, one

⁴⁵ ViVa is not proposed as an option for supervising junior medical staff under this design. The Project is scheduled to close at the end of the current rotation around the first quarter of 2015 (*Smol Toktok Blong ViVa* – Newsletter of the Victoria-Vanuatu Physician Project, July 2014).

Bachelor of Dental Surgery, and one Diploma of Dental Technology. Australia is also providing in-country support to strengthen biomedical engineering and procurement.

Offshore and visiting specialist services

Australia and New Zealand also support visiting specialist services not available in Vanuatu.

The Australian-funded Pacific Islands Program began in 1995 as a clinical service to PICs. In 2009, based on the recommendations of the external review, the focus expanded to include capacity development for in-country clinicians and for PIC advanced trainees undertaking Master's or Diploma level programs at FNU. The Pacific Islands Program (PIP) is managed by the Royal Australasian College of Surgeons.

PIP includes visiting specialist teams for patient assessment and follow-up, and either treatment in-country or patient referral⁴⁶ to Australia or New Zealand for treatment. The New Zealand MTS provides specialist medical services in New Zealand, Australia and Fiji for the PICs of Fiji, Kiribati, Tonga, Tuvalu and Vanuatu. There are two components: overseas referrals and visiting medical specialists for in-country patient assessments and either overseas referral or in-country treatment. MTS also now has a focus on capacity building which MWSPV should look to leverage off.

In-country coordination for visiting medical teams is said to have significantly improved since the recent appointment of a local coordinator funded by SSCISP. The position has also coordinated some aspects of the current Australian support, including streamlining some administrative matters related to the externally recruited doctors such as the paperwork for Vanuatu medical registration. SSCISP (and therefore funding for the position) will cease at the end of June 2015 (unless extended to December 2015 by mutual agreement between DFAT and FNU). MWSPV will have a similar local appointment to assist in-country coordination of MWSPV activities including coordination of visiting teams.

The active direct involvement of ni-Vanuatu specialists with PIP or MTS in-country activities depends on the type of cases presented. If their skills are not compatible with the visiting team's purpose, they are more likely to observe. Synergy and leverages between MWSPV, PIP and MTS for capacity building could all be more strongly leveraged for greater return on investment to Vanuatu to include, for example, participation in grand rounds, multidisciplinary lectures, journal clubs, peer reviews, and clinical and death audits. MWSPV playing a role in facilitating and supporting this leveraging is part of the proposed MWSPV approach.

⁴⁶ Patients who are referred are not funded by PIP.

Annex 4: Behaviour change and MWSPV

This annex discusses MWSPV strategies to achieve behaviour change.

Phases in Behaviour Change

The first targets awareness raising or the pre-contemplation stage of change; the second motivation for change; the third external factors influencing change. The final section describes the current state of change in the ni-Vanuatu medical workforce as assessed by the program preparation team.

Awareness

The first strategy is the leveraging off the current GoA support where awareness raising has well begun on the system changes needed to strengthen tertiary services.

Second, MWSPV will have two linked leadership and management development activities leading to the MWSPV output of 100% of ni-Vanuatu specialists trained in leadership and management. The first activity will largely continue the current leadership and development approach based on mentoring for the design and implementation of individual cross-cutting projects for system change. A senior, skilled clinician mentor is a key input to MWSPV to support this. The second activity will supplement and augment this through an action-learning leadership and management development program, tailored to Vanuatu's needs. This program will also have system change projects but they will be designed and developed by sub-groups of the ni-Vanuatu specialists, helping to build towards a culture of collaborative practice for best practice patient outcomes. Third is the senior clinician mentor – a critical input across all outputs to support behaviour change.

Ni-Vanuatu doctors are a precious commodity and critical to improved health outcomes for ni-Vanuatu. Building a collective culture of medical leadership excellence requires all senior ni-Vanuatu doctors to participate in MWSPV's leadership and management development initiatives. Given the frequent changes in Vanuatu's health system the leadership and management development and mentoring support to achieve system change training will provide them with knowledge and skills transferable to any position.

Coverage of both activities will result in the output of 100% of ni-Vanuatu senior doctors with improved leadership and management capacity, transferable to any role or position. The quality of the programs will be paramount. The content of the action learning program will be tailored to Vanuatu's needs, will be based on international best practice, use modern interactive learning processes, provide appropriate learning materials and the senior clinician MC mentor will provide ongoing support to assist with individual and group projects for system change.

This approach also provides for 'dose'.⁴⁷ 'Dose' refers to the fact that single training does not have a causal link to behaviour change. Instead cognitive psychology research shows that learning and behaviour change requires repetition and application of concepts in a variety of different settings before learning and possibly behaviour change results.⁴⁸ Both leadership and development strategies reflect and reinforce this with the action-learning program being a particularly powerful complement to the work of the senior clinician mentor.

⁴⁷ Dawson, S. Op. cit.

⁴⁸ Ibid.

Motivation

Motivation will be assisted by the above, supported by the skills and frequent in-country availability of the senior clinical mentor. As well, having all ni-Vanuatu specialists engaged together in the leadership and development program enables the development of common knowledge, awareness, mutual support, through peer pressure and encouragement. Motivation will also be supported by CPD funding support. The strengthened counterpart model, with support from the senior clinicians mentor, holds promise for further reinforcing behaviour change across a range of initiatives including collaborative practice and clinical audits. Above all, the skills of the managing contractor engaging with the ni-Vanuatu specialists will be the key to ongoing motivation, along with well designed activities that meet their needs.

External factors

The key external factors supporting change are the changes that ni-Vanuatu specialists have already had to adapt to, and the possible new directions under the new MoH leadership. This applies whether or not they have roles as medical managers or specialist clinicians. Other drivers for change are the large cohorts of interns due to commence from 2015 who will require support, teaching, mentoring and evidence-based assessment, not just in their intern year but in the years beyond, and the fairly rapid increase in ni-Vanuatu clinical specialist supply. A key constraint is the health budget which in 2014 is likely to be exhausted by end-September, and which impacts on infrastructure and essential medical supplies and therefore on tertiary services. Other key constraints have been discussed earlier (e.g. health workforce supply with the paradoxical situation of over-supply of interns and student nurses from 2015).

Current state of change

The logic and change frame (investment design standard 1.11) of MWSPV is influenced by the ni-Vanuatu specialists demonstrating during program preparation consultations that they have already started along the continuum of behaviour change. Many are beyond the pre-contemplation phase. These changes are the result of many factors but include the last 16 months of GoA support and its strategic focus on behaviour change. This strategic focus has included mentoring ni-Vanuatu specialists for leadership and management development, and providing the CPD financial incentives. The health context of Vanuatu is also a driver for change with its reforms and restructuring. There remains a considerable way to go, however, to achieve the proposed MWSPV EOPOs.

Changes described during the program preparation consultations include a senior specialist changing his previous aggressive behaviour to a fellow senior staff member to an approach based on negotiation and compromise to achieve outcomes instead – as a result of HSL mentoring and advice. Another change is a senior specialist doubling the number of surgical procedures performed with visiting teams, rather than observing, due, he said, to more confidence and a renewed desire to continue to learn, through the current GoA support.

Organisational changes are in progress through the cross-cutting activities associated with the current leadership and development program (e.g. review, enhancement and implementation of a new intern program) and these will be supported by MWSPV and additional work started.

Behaviour change as applied through the MWSPV

Theories of change

Behaviour change in ni-Vanuatu senior doctors will underpin the success of MWSPV.

There are many theoretical models of behaviour change and no universal agreement on which best represents an empirical truth.⁴⁹ Achieving behaviour change is complex,⁵⁰ and is reliant on a multitude of factors. Which factors are decisive in achieving behaviour change in medical clinicians remains a subject of study.⁵¹ Most knowledge of incentives for and barriers to change is derived from observational studies and theoretical perspectives rather than prospective studies. While not based on traditional scientific studies, these theories and observations are useful to identify potential barriers and enablers or promoters of change.⁵² What is known is that the motivation, skills and knowledge of doctors play a part, as do peer attitudes and behaviours, and the culture and resources of the context in which doctors work.

Behavioural change theories all suggest a transitioning through various stages before behaviour change results – whether at an individual, organisation or societal level. The number of suggested stages and time vary, and experience reinforces this. Behavioural change theories suggest – and experience again reinforces – that the stages include a pre-contemplation phase, moving then through a motivation change to then begin behaviour change and starting its cognitive integration to maintain the change.

The program preparation team found that, under current Australian-funded HSL-managed support program, some of the ni-Vanuatu doctors consulted appear to be transitioning through the pre-contemplation to the motivation stage and are beginning behaviour change.

Doctors' behaviour change and financial incentives

DFAT supported the introduction in 2014 of a small Leadership and Development Fund and Program (LDP) to incentivise the implementation of specific, agreed, essential system development initiatives by ni-Vanuatu specialists (e.g. clinical standards and their monitoring, auditing of clinical practice, junior doctor supervision and teaching) and support CPD activities.

The LDP fund is unique in the Pacific but the principle of providing financial incentives for CPD and changes in practice are applied widely across the world, including in Australia and New Zealand and reflect 2007 findings on retaining and motivating health workers in the Pacific Islands.⁵³ Ni-Vanuatu specialists have responded strongly and enthusiastically to the current LDP fund and CPD strategy, saying it incentivises their learning and professional development; these views align with an assessment by the (Australian) Victorian Department of Human Services, which states that doctors must value the incentives available to them and that those incentives must be directly linked to effort.⁵⁴

Under MWSPV, all ni-Vanuatu specialists and advanced trainees will develop mutually agreed, individual CPD plans, linked to the LDP, and these will be pre-requisites for accessing additional, program-managed CPD resources. From Year two, it is anticipated that leadership development and CPD activities will gradually shift to MOH responsibility (subject to the findings and recommendations of an end-of-Year 1 evaluation of MWSPV).

⁴⁹ One analysis of the issues and dissenting views is, for example, at www.behaviourworksaustralia.org/wp-content/uploads/2012/09/BWA-StageTheories.pdf.

⁵⁰ For example, see Queensland Health's paper on stages of behavior change at www.qld.gov.health.au/stayonyourfeet/33331.pdf or the Royal Melbourne Institute of Technology's research program 'Beyond Behaviour Change' at www.rmit.edu.au/research/urban/beyondbehaviour.

⁵¹ Grol, R and Mensing, W. *What drives change. Barriers to and incentives for driving change*. Med J Aust. 2004. 180(6). 57.

⁵² Ibid.

⁵³ Henderson and Tulloch. *Op cit*

⁵⁴ http://www.health.vic.gov.au/clinicalengagement/downloads/pasp/partnering_for_performance_-_senior_doctor,_management_and_organisational_competencies.pdf.

Evidence-based practice relevant to the Vanuatu setting

A MWSPV EOPO is that senior ni-Vanuatu doctors will help the health system to achieve the best possible patient outcomes.

The concept of evidence-based clinical practice – or context-specific best practice – is used widely in health settings. However, even in developed country health systems, there is a gap between evidence-based “best practice” and actual clinical practice; studies from the United States of America and the Netherlands suggest that the gap may be as large as 30-40% of patients.⁵⁵

Empirical data show that the critical factors in adopting evidence-based practice are *lack of awareness* and *motivation*, and *perceived external factors*.⁵⁶ These are consistent with theories of behaviour change.

MWSPV will be grounded in reality and support ni-Vanuatu doctors in their journey towards evidence-based practice, recognising the contextual realities associated with patient access and timeliness of presentation, the condition of health facilities and functionality of referral networks following the 2015 cyclone, the range of available clinical tests and treatments, and the finite limitations of the Vanuatu health budget.

⁵⁵ *Grol et al. Op cit.*

⁵⁶ *Ibid.*

Annex 5: PCC terms of reference

The PCC will be the key decision making body for MWSPV and will:

- provide direction on MWSPV priorities and budget limit and allocation;
- review, comment on and approve annual and other plans;
- oversight monitoring of program outcomes and quality;
- approve terms of reference for any technical inputs and for the joint annual review;
- encourage a culture of coordination, collaboration, innovation and performance within MWSPV;
- facilitate dispute resolution.

The PCC will meet formally twice each year, and will exchange information and advice as and when required outside the formal meetings. The Managing Contractor will provide secretariat support to the PCC under the guidance of DFAT Vanuatu.

The Managing Contractor will provide secretariat support to the PCC, which will include:

- organising PCC meetings in consultation with PCC members, providing briefing materials and presentations as required, recording the PCC minutes, and providing information, analysis and advice;
- organising closely with DFAT Vanuatu and MOH to ensure each maintains awareness of agreed mutual responsibilities and obligations, and priorities and interests;
- maintaining good relations with PCC members and with the DFAT and other GOV DPs.

Annex 6: Mutual obligations – GOV and DFAT

Possible mutual obligations of both parties are presented below.

The MOH will:

- articulate GOV development needs and negotiate MWSPV priorities.
- facilitate efficient medical registration for externally recruited specialists.
- facilitate Value Added Tax (VAT) exemption for project expenses (note this may be challenging as, under GOV legislation, unless MWFSV funds pass through GOV [MFEM/MOH] accounts program (and as a result is conducted as a GoV tender), the project will be considered aid-in-kind and will not be able to receive VAT exemption on domestic purchases. MOH will be able to arrange special visas for all project participants/personnel, duty/VAT exemption for any imports of materials, supplies or personal effects, but not obtain a zero rated certificate for VAT. This is a historic issue of which DFAT is aware and will need to be addressed at high levels.
- ensure the availability and engagement of ni-Vanuatu specialist counterparts as a primary obligation.
- chair the PCC meetings and take the lead role in the coordination of MWSPV activities on behalf of GOV.
- ensure effective coordination between MWSPV activities and those of GOV, other development partners and other key stakeholders, including (where relevant) in the area of post-cyclone restoration of health facility functionality and the health workforce.
- facilitate coordination of MWSPV across the various levels of the health system as needed, particularly at provincial and hospital levels.
- provide access to relevant documents, data and facilities that will facilitate implementation of agreed activities.
- provide input to the development of annual and other plans and agree the final products at the PCC.
- maintain dialogue and relationships with central GoV agencies such as MEFM and the Public Service Commission (PSC) in relation to MWSPV to support sustainability of tertiary services including self-sufficiency in the future supply of clinical specialists.
- share lessons learned and experiences with DFAT and DP community.
- help overcome implementation problems should they arise.

The MOH may provide a venue for various MWSPV meetings and will provide office space for MWSPV staff or consultants.

DFAT Vanuatu will:

- articulate Australia's development priorities and negotiate MWSPV priorities.
- participate in PCC meetings and take the lead role in the coordination of MWSPV activities on behalf of the Australian Government.
- provide input to the annual and other planning processes, including provision of forward budget estimates.
- maintain dialogue and build relationships with the GOV, other donors, NGOs and other stakeholders.
- manage the contract with the managing contractor, including oversight of planning and monitoring processes and providing guidance as needed and appropriate.

- agree terms of reference for MWSPV technical advisors and consultants prior to their presentation to the PCC for approval.
- promote linkages between MWSPV and other Australian-funded activities in Vanuatu and regionally, including for example with the DFAT Vanuatu scholarship program, the AYAD, FNU support, PIP and local funding for locally engaging consultants and advisors, and with activities of other DPs for leverage and synergies.
- promote MWSPV in Australia and in Vanuatu.
- participate in fora in tertiary services-related fields.
- share lessons learned and experience with GoV and DPs.
- help overcome implementation problems should they arise.

Annex 7: Budget

Provided as a separate document.

The successful managing contractor is encouraged to explore alternative, creative approaches within the available budget envelope, including options for linking constructively with the post-cyclone response for restoration of health service, health facility and health workforce functionality.

Annex 8: MWSPV principles

The MWSPV principles are:

- Australian Aid Program policy adherence
 - MWSPV will adhere to all Australian Government's policies for the Australian Aid Program including for fraud control, gender equality and its mainstreaming, child protection and safety, social inclusion, value for money and ensure effective risk management of these and other identified risks.
- Partnership
 - MWSPV will be delivered in partnership between the Governments of Australia and Vanuatu, as reflected in the *Australia-Vanuatu Joint Development Cooperation Strategy*,⁵⁷ with ni-Vanuatu specialists leading activities, mutual responsibilities and obligations agreed, and a sliding scale agreed of receiving MWSPV payments against the degree to which those responsibilities and obligations are met.
- Synergies and leverages
 - Synergies and leverage will be sought for MWSPV as reflected in the *Joint Partnership Arrangement between GOV and Development Partners 2010-2016* and other relevant Australian, national and regional initiatives.
- Constructive relationships
 - Continuous dialogue between DFAT, GOV and the managing contractor and maintenance of excellent and constructive relations will be a feature of MWSPV based on mutual trust, fairness, openness and accountability.
 - Effective external relationships with postgraduate training providers (e.g. FNU) and other countries receiving foreign trained medical graduates (FTMG; e.g. Kiribati, Solomon Islands) will underpin the revised VMIP to protect future career options for entry level medical staff
- Return on investment
 - Value for money will be paramount and all decision will be based on the potential ROI, including sustainability.
- GoV aligned
 - MWSPV will be aligned with GoV structures and systems.
- Better health and services
 - Improved service delivery and health outcomes will be the overriding focus.

⁵⁷ Due for updating later in 2014.