

Australia Timor-Leste Program of Assistance for Secondary Services (ATLASS)

Phase II

Final Program Design Document

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Acronyms

AETSSP	Australia East Timor Specialist Services Project
ARF	AusAID Adviser Remuneration Framework
ATLASS	Australia Timor-Leste Program of Assistance for Specialised Services
AUD	Australian dollar
AusAID	Australian Agency for International Development
AWP	Annual work plans
BME	Biomedical engineering and maintenance
BEmONC	Basic emergency obstetric and neonatal care
CHC	Community Health Centres
CEmONC	Comprehensive emergency obstetric and neonatal care
DAC	Development Assistance Committee (OECD)
DHS	Demographic and Health Survey
DP	Development partner
ENT	Ear, nose and throat
FSMed	Fiji School of Medicine
GOTL	Government of Timor-Leste
HNGV	Hospital Nacional Guido Valadares
HRH	Human resources for health
IELTS	International English Language Testing Scheme
iNGO	international non-government organisation
IPR	Independent progress review
JAR	Joint Annual (health sector) Review
LTA	Long-term Technical Assistance
MDG	Millennium Development Goal
MGB	Medicina General Básica
MGI	Medicina General Integral
MMR	Maternal mortality ratio
MNCH	Maternal, neonatal and child health
MOH	Ministry of Health
NCD	Non-communicable disease
NHSSP	National Health Sector Strategic Plan 2011–2030
NHSSP-SP	National Health Sector Strategic Plan Support Project
OECD	Organization for Economic Cooperation and Development
PHC	Primary and preventive health care
PMC	Program Management Committee
RACS	Royal Australasian College of Surgeons
SDP	Timor Leste Strategic Development Plan 2011–2030
SISCa	Servisu Integrado da Saúde Comunitária
SJOG	St John of God Health Care
STA	Short-term Technical Assistance
SWAp	Sector-wide approach
TORs	Terms of reference
UNFPA	United Nations Population Fund
UNTL	Universidade Nacional de Timor-Leste

UPNG
WHO

University of Papua New Guinea
World Health Organization

Executive Summary

When Timor-Leste gained independence from Indonesia in 2002, the entire governance and service delivery system, including the health system, needed to be rebuilt. Skilled personnel had fled and infrastructure had been destroyed. After almost ten years, impressive achievements have been made and a basic health system and its inputs – the workforce, infrastructure, drugs, equipment and systems – are increasingly available. However, the quality, reach, and effectiveness of the system, unsurprisingly, remains variable. The health system is further hampered by a referral chain which is missing some crucial links: most notably the staff and systems able to support comprehensive emergency obstetric care services (ie including caesarean sections and blood transfusion) and neo-natal care. Maternal death rates remain among the highest in the Asia region and account for 42% of all deaths in women aged 15 – 49 years.¹ Despite some progress in child health, 50% of under-five deaths occur in the first week of life.²

AusAID began funding the Royal Australasian College of Surgeons (RACS) to provide support for the delivery and development of specialised clinical services in Timor-Leste in 2001.³ Since 2006, at the request of the Ministry of Health, AusAID support for clinical services has been through the *Australia Timor-Leste Program of Assistance for Specialised Services 2006–12* (ATLASS), implemented by RACS with a budget of AUD 9.3 million over 5.5 years (including two six month cost extensions).

ATLASS represented a progression towards a more sustainable, long-term approach to building Timorese capacity in some basic but also specialised secondary services. In addition to service delivery through the provision of long-term in-country technical assistance, the program has supported in-country mentoring and training for Timorese doctors and some nurses (primarily nurse anaesthetists) and fostered overseas scholarship opportunities for Timorese trainee surgeons. The program has also supported a program of visiting specialist teams from Australia. ATLASS and its predecessor are responsible for some notable achievements: they have allowed Timor-Leste to become self-sufficient in basic anaesthesia services, and have trained the country's first ophthalmologist, anaesthetist, and two general surgeons.

This design, for the *Australia Timor-Leste Program of Assistance for Secondary Services* (ATLASS Phase II), responds to agreed priorities in the 2011 Australia-Timor Leste Strategic Planning Agreement for Development. It reflects a request to AusAID from the Timor-Leste Ministry of Health (MoH) for a transition to developing basic secondary services provision delivered by Timorese staff, and reflects the Government of Timor-Leste's own stated objectives for health. The design has been developed in consultation with the MoH. Ensuring quality primary and preventive health care services – especially those focusing on the needs of women, children and vulnerable groups – and developing a hospital service that is able to respond to the population's need for basic secondary care, are the principal health service delivery pillars of the *Timor-Leste Strategic Development Plan 2011–2030* (SDP) and the *National Health Sector Strategic Plan 2011–2030* (NHSSP).

This design reflects ten years of AusAID lessons learned on the provision of secondary services in Timor-Leste, and incorporates some key recommendations arising from an independent progress review of ATLASS in 2010, and a March 2012 independent review of ATLASS based on a needs assessment and gaps analysis. Both reviews found that the ATLASS program is highly-regarded, and that RACS is a professional and responsive partner to both the Australian and Timorese governments. Both reviews recommended that the new program address the Millennium Development Goal priorities of maternal and neonatal health outcomes much more strongly and

¹ National Statistics Directorate (2010). *Timor-Leste Demographic and Health Survey, 2009-10*.

² National Statistics Directorate (2010). *Timor-Leste Demographic and Health Survey, 2009-10*.

³ While their principle areas of focus have been on the delivery of specialist medical services and, more recently, capacity development for doctors, RACS inputs have also addressed the skills of (for example) ear, nose and throat and eye care nurses and other categories of health worker, and the capacity of hospital administrators to plan and manage visiting and outreach clinical services. In this context, the term 'specialised' is preferred to 'specialist', which infers a narrower, mainly medical focus and meaning.

that it support newly qualified Timorese doctors in developing their basic secondary services competencies to provide a long term sustainable service. Other findings and recommendations included the need to improve monitoring and evaluation systems; ensure sustainability by focusing on in-country capacity building and mentoring; and emphasise quality through support to the development of policies and protocols for the provision of secondary care services. The design has been developed in close consultation with RACS.

The design proposes that AusAID continues to support the Government of Timor-Leste (GoTL) for a further four years (July 2012 – June 2016) through a program which will include the on-going provision of an in-country anaesthetist, a general surgeon, and an orthopaedic surgeon. The program will also greatly benefit from the addition of in-country specialists in obstetrics and paediatrics. These specialties meet prioritised needs as identified by the NHSSP and will support the establishment of basic secondary services in all hospitals, with an emphasis on women and children. ATLASS II will support a vital link in the chain of care during pregnancy, delivery, and the neonatal period. Provision of these key services will mean that ATLASS II's focus on maternal, neonatal and child health (MNCH) will be somewhere between 50 and 60% of the program.

The design proposes a much stronger emphasis on in-country specialists supporting the following areas:

- Further development of clinical care protocols and standard treatment guidelines, especially for obstetrics and paediatrics.
- To support the implementation of these as 'standard operating procedures' which are capable of being audited.
- Supporting the introduction of maternal and neonatal mortality reviews in hospitals.
- Development of the curriculum for modules in anaesthetics, orthopaedics, general surgery, obstetrics and paediatrics as part of an 18 month post graduate Diploma course planned by the National University of Timor-Leste (UNTL).
- Support to the delivery of these modules at UNTL – including support to training of UNTL lecturers - and acting as clinical tutors in hospitals and other secondary care facilities.
- Ongoing supervision and mentoring of doctors who are undertaking or have undertaken the Diploma, including accrediting their experience in log books or portfolios.

Given this significant increase in the number of in-country specialists and a much increased focus on in-country capacity building in basic services, it is proposed that the focus of short term visiting teams shift over the course of the new program. Where there has been a local counterpart identified and capacity building has taken place in a service which is part of basic secondary care (ie in the instances of some urology procedures and cleft lips and palates in infants), this relationship should be maintained. In the short term, this will mean on-going short term visits by Australian specialists. In the medium term, this will shift to a focus on regular e-supervision, complemented by the use of clinical logbooks to document assessed competence. For other sub-specialty areas (ie ear, nose and throat surgery), this shift to e-supervision and support to the development of the Diploma modules will take place over a shorter timeframe. This will allow the in-country specialists to focus on building a cohort of competent and experienced Timorese doctors to meet the needs for basic secondary care through the Diploma courses in a realistic timeframe. It is envisaged that each cohort number approximately 12 – 15 trainees.

In the short-to-medium term, this emphasis on in-country training will have a significant positive impact on the availability and quality of key basic secondary services in district referral hospitals. On-going supervision and mentoring of Diploma graduates by the ATLASS II in-country specialists will be supported, including through the rotation of the specialists to the referral

hospitals following the deployment of the Diploma graduates. Successful completion of the Diploma could also form one of the pre-requisites for further overseas specialist training. This will be explored at the mid-term review point of ATLASS II. In the meantime, though new overseas scholarships will not be offered, those who are still completing their studies under the current phase of ATLASS will continue to be supported.

It is expected that ATLASS II will contribute to the GoTL's overall goal of healthy Timorese in a healthy Timor-Leste, as a result of the following proposed end of program outcomes:

- Approximately 18 existing Timorese surgeons competently provide appropriate services (obstetrics, paediatrics, anaesthetics, general surgery and orthopaedics) with on-going supervision, including at district referral hospitals.
- UNTL lecturers in the Faculty of Medicine competently deliver Diploma modules based on evidence and nationally agreed standard protocols in obstetrics, paediatrics, anaesthesia, general surgery and orthopaedics.
- Approximately 24 – 30 Diploma graduates competently provide appropriate services in obstetrics, paediatrics, anaesthetics, general surgery and orthopaedics (with an emphasis on trauma and mitigation of disability), including at district referral hospitals.

1 Health Sector Context, Situational Analysis and the Rationale for the Proposed Response

In 2010, Timor-Leste ranked 120 out of 177 countries on the United Nations Development Program Human Development Index,⁴ and its progress towards the Millennium Development Goals (MDGs) – including the health-related MDGs – has been mixed.⁵

Ensuring quality primary and preventive health care (PHC) services – especially those focusing on the needs of women, children and vulnerable groups – and developing a hospital service that is able to respond to the population's need for secondary care are the principal health service delivery pillars of the *Timor-Leste Strategic Development Plan 2011–2030* (SDP). Both the SDP and the *National Health Sector Strategic Plan 2011–2030* (NHSSP) appropriately prioritise the delivery of primary and preventive health care services – focusing especially on the needs of women, children and vulnerable groups. Both documents also recognise the need to develop an affordable, sustainable hospital service that is able to respond to the population's needs for basic secondary care.

In addressing these challenges, the Ministry of Health (MoH) in Timor-Leste has made significant progress since independence in re-establishing basic health infrastructure, facilities, services and coverage. Fixed health facilities currently include 192 Health Posts, 66 sub-district Community Health Centres, 5 sub-national referral hospitals (located in Baucau, Maliana, Maubisse, Oecusse and Suai) and the Hospital Nacional Guido Valaderes in Dili. At the community level, fixed facilities are supplemented through a system of integrated primary health care outreach services (*Servisu Integradu da Saúde Comunitária*; SISCa).

Despite health care services being free of charge in Timor-Leste the demand for, access to and utilisation of all these services is uneven and generally low, especially among poorer residents of remote rural areas. Consumer concerns affecting utilisation include cultural and family reasons, the availability of staff (especially female staff to treat female patients) and medications, and the cost of transportation to distant facilities.³

Demographic and Health Survey (DHS) data indicate that the country is on track to meet its child health related MDG targets: under-five child mortality fell from 115 per 1,000 live births over the period 1995-1999 to 64 per 1,000 in 2005-2009, while infant mortality fell from 83 to 45 per 1,000 over the same period.⁶

However, the maternal mortality ratio of 557 per 100,000 live births remains among the highest in the Asia-Pacific region, and maternal death reviews are not routinely conducted. Only 30% of births are delivered with the assistance of a skilled birth attendant, and just 22% occur in a health facility. Over half of all infant deaths occur in the first week of life.³ And an estimated one-in-three married women has an unmet need for family planning advice and services.

The Partnership for Maternal, Newborn & Child Health estimates that nearly two-thirds of newborn and child deaths globally could be avoided if essential care was provided along the internationally-accepted continuum of care: from adolescence, through pregnancy & birth, and in the postnatal period, and for mothers, infants, and children.⁷ The continuum includes family planning, ante & post natal care, childhood immunisations, skilled birth attendance and support for caesarean sections, as well as exclusive breastfeeding. Gaps in all these areas – especially for the provision of emergency caesareans – are to be found in Timor-Leste, disproportionately contributing to the poor health outcomes for women and children.

The estimated caesarean section rate in Timor-Leste (1.5% of all births) is well below the 10-15% that the World Health Organization (WHO) recommends as a minimum provision and that

⁴ UNDP (2010). *Human Development Report, 2010*

⁵ UNDP (2009). *The Millennium Development Goals – Timor-Leste*

⁶ National Statistics Directorate (2010). *Timor-Leste Demographic and Health Survey, 2009-10*.

⁷ PMNCH, 2010, *Enable the Continuum of Care*, pp. 16

evidence shows is essential to address the expected incidence of obstetric complications relating to obstructed delivery.⁸ In Timor-Leste this is often due to a lack of qualified staff, particularly in the districts, who can perform caesareans as part of comprehensive emergency obstetric and neonatal care (referred to as CEmONC). Maternal mortality is shown to be due to haemorrhage, eclampsia (and lack of essential drugs such as magnesium sulphate), obstructed labour and sepsis, but may also reflect delayed referral and poor access. A recent report concluded that given Timor-Leste's population size and birth rate, 19 deliveries where birth complications arose could be expected per day in the country;⁹ however, National Hospital staff report only performing one caesarean section daily.¹⁰

There is one Nepalese obstetrician in Timor-Leste (originally funded by United Nations Population Fund (UNFPA) and now by the Government of Timor-Leste) who has been fulfilling both a service role and developing capacity in safe and clean delivery (Basic Emergency Obstetric and Neonatal Care (BEmONC)). In addition, there is one Chinese obstetrician at the national hospital and a member of the Cuban Medical Brigade in each of the five referral hospitals, all of whom focus on service delivery, not training. The provision of Cuban doctors is due to cease in 2017 and there is an urgent need to ensure continuity through developing local capacity. So far, 300 midwives have been trained in safe and clean delivery, although not all are certificated. In order to provide the continuum of care (see Figure 1), there is an urgent need to develop obstetric surgical capacity in referral hospitals, including the capacity for caesarean sections. This would complement the work being undertaken by Australian funded NGOs at the community level in strengthening referrals to skilled birth attendants

1.1 Human resources for health context in Timor Leste

Since independence, the health work force (and human resources for health policy) in Timor-Leste has been undergoing a series of major transformations in order to achieve a greater degree of self-reliance.

The most significant decision has been to train – with the assistance of the Republic of Cuba – large numbers of additional doctors for wide deployment throughout the country, with a particular focus on bringing them to remote rural areas and communities.¹¹ Their basic training has had a strong focus on primary and preventative care. In order to provide basic secondary services, further training and development will be required.

The NHSSP presents an extremely ambitious plan to position, by 2020, some 588 general practitioners at the community (Health Post) and sub-district (community) level and 216 general hospital doctors and 193 medical specialists in the district and referral hospitals. Planned growth of the Dili-based work force is designed to enable the number of medical staff at the national hospital to increase further to 70 generalists and 48 specialists (across a broad range of specialties and sub-specialties) by 2023.¹²

The pattern of deployment and medical work force growth proposed in the NHSSP is based simply on mathematical projections; the direct (salary, housing) and indirect (diagnostic, prescribing and referral patterns) impact of the plan on the health budget have not been costed.

⁸ WHO. Appropriate technology for birth. *Lancet* (1985); 2(8452): 436-7. Although data are lacking, the most common causes of maternal death in Timor-Leste are reported to be post-natal and antenatal haemorrhage, post-partum sepsis, obstructed labour and hypertensive disease of pregnancy

⁹ UNFPA, State of World's Midwifery report 2011, pp. 139

¹⁰ Dr Amrita, MoH obstetrician, discussion at NHGV on 7/3/12

¹¹ The Cuban commitment is reported to be to train a total of 1,000 new doctors by 2020. No documentary evidence in support of this was available for review.

¹² There are corresponding plans for large-scale increases in the number of nurses and other categories of health care worker. By 2030, the NHSSP projects that more than 3,300 nurses and midwives will be working at the community and CHC level and almost 2,200 in the district and referral hospitals. Plans and processes are being put in place to increase the nursing and midwifery through-puts and research capacity at the UNTL.

As part of its commitment to increase the size of the medical work force, Cuba has also committed to help the Government of Timor-Leste (GOTL) to establish in-country medical training and has helped to found a medical faculty at the National University (UNTL).

The UNTL curriculum is modelled on the Cuban system. It places a strong emphasis on community and family practice and health promotion, but currently includes very little exposure to procedural training in areas like obstetrics or the management of common minor trauma or surgical ailments. It is not yet capable of being accredited but this is the long term aim.

Since commencement of the Cuban-sponsored scheme in 2004, almost 1000 students have enrolled for medical training.¹³ The majority (677) have undertaken Spanish language training, basic sciences and pre-clinical course-work in Cuba and then returned to complete their final two clinical years of training in Timor-Leste. A smaller number (270) have embarked on training entirely in Timor-Leste. Regardless of whether training is completed wholly or partly in-country, the basic medical degree (*Medicina General Básica*; MGB) is awarded by UNTL.

The number of medical graduates entering the health system will surge from 2012 onwards – a very large number are already undertaking internship rotations in the national and referral hospitals. From among the more than 900 students currently training in Cuba or Timor-Leste, just over 500 are expected to be eligible to graduate at the end of 2012 and up to another 250 in 2013. This will be accompanied by the relatively rapid withdrawal of Cuban doctors from the community and district level by 2017,¹⁴ resulting in a sharp reduction of the overall experience and skills of the medical work force.

In parallel with the undergraduate program, 11 Timorese medical graduates from Indonesian universities and one dentist have completed overseas training in clinical specialties (or will complete their training this year). A further 17 candidates are currently enrolled in overseas universities for specialist training. Provided all continue to practise in Timor-Leste on completion of their training, this still represents a short-fall of 165 specialists against the NHSSP 2020 targets. Additionally, this training alone will not meet the need to provide basic secondary care in Dili and in the referral hospitals

The implementation of these human resources policies – including unclear approaches to re-entry training and orientation for the new Cuban-trained medical graduates – will severely test the capacity of training institutions. It also raises questions about the quality of training experiences, and the preparedness of a very junior Timorese medical work force to meet the front line clinical challenges in hospitals and the community. The progressive deployment of huge numbers of doctors across the country with no means of providing supervision will also present broader challenges to MoH strategies, career pathways and models of service delivery.

1.2 Australian and other donor support for the health sector in Timor Leste

Australia has supported the health sector in Timor-Leste since 1999. In 2011-12 we invested AUD 7.8 million in the sector (with a further AUD 7 million for water & sanitation), making us the largest bilateral donor to the health sector by a significant margin.

Our current portfolio of seven health sector projects reflects the post-conflict era in which it originated. Using a variety of funding mechanisms, it attempts to balance direct service delivery and support to service delivery at various levels with longer-term system strengthening in the interests of sustainability. As well as ATLASS, it consists of:

- a World Bank-administered MoH-executed multi-donor trust fund (MDTF) to support key systems strengthening (especially in public financial management) and service delivery (H/NHSSP-SP);

¹³ The WHO is currently assisting the MOH to update the national HRH data base. The numbers of medical students and other categories of health worker must therefore be regarded as provisional and approximate.

¹⁴ Dr Osvaldo Rabanal Head of the Cuban Medical Brigade, discussion on 8/3/12.

- a joint AusAID-USAID Health Improvement Project in five key districts, focusing on maternal and child health, nutrition and family planning as well as strengthening the health management information system (HADIAK);
- funding for the World Food Programme's supplementary feeding program for women and children identified as malnourished;
- support for procurement of family planning commodities through UNFPA;
- support for family planning & reproductive health advice and services through Marie Stopes International; and,
- support for community based maternal and newborn care through Health Alliance International.

In addition to these projects, Australia (through AusAID headquarters) provides core funding to multilateral agencies and global initiatives that are active in the health sector in Timor-Leste (such as the Global Fund and UN agencies), and to some large INGOs for specific activities.

From July 2012, our new portfolio will consist of three investments, which will contribute in different, complementary ways to saving the lives of mothers and children, increasing equity in health, and improving governance. Each of our investments will reflect recommendations from its predecessor(s) and, where required, further targeted research. In addition to building the capacity of the MoH (supply side) we will support efforts to empower communities (demand side).

We expect that, for at least the next three years, our funding will flow through three main channels: the World Bank MDTF (NHSSP-SP), a large new program based around a consortium including NGOs for family planning, nutrition, and maternal & child health; and ATCLASS II. Our overall budget to the health sector will grow significantly – it will more than double in the next three years (from AUD 7.8 million in 2011-12 to a projected AUD 18 million in 2014-15).

Fifteen other external development partners (DPs) are currently supporting well over 100 projects in the health sector in Timor-Leste, illustrating the fragmentation of the sector and the need for much improved coordination (which AusAID is beginning to support the MoH to lead). The most significant DPs are: the Global Fund for AIDS, Tuberculosis and Malaria (GFATM); the European Commission (EC), the United States Agency for International Development (USAID); Cuba; United Nations Fund for Population Activities (UNFPA); United Nations Children's Fund (UNICEF); World Food Program (WFP) and World Health Organization (WHO).

1.3 Other donor support for secondary services

Where it relates to secondary care services, Cuba, UNFPA, and to a lesser extent China provide personnel and some training, and the WHO are providing support for the development of relevant policies and plans. St John of God supports the provision and development of nursing services at the national hospital.

The Cuban Medical Brigade currently consists of approximately 200 staff, of whom 164 are doctors. The majority have a preventative focus although there are also doctors working in the national and referral hospitals. Each of the referral hospitals has an allocation of one obstetrician, one paediatrician and one general surgeon together with a radiology technician and a technician capable of undertaking a limited range of pathology including cross matching of blood. In addition to the above, the national hospital has specialists in maxillo-facial surgery (1), orthopaedics (2) ophthalmology (2), ear, nose & throat (1), urology (1) and radiology (1). It is understood that the Brigade will remain in country, albeit in decreasing numbers, until 2017.

China supports the national hospital through provision of specialised staff including an obstetrician and a radiologist. Their role is almost exclusively confined to service delivery.

UNFPA has supported the presence of an obstetrician to develop basic obstetric services who has been in the country since 2005. The obstetrician had a strong capacity building focus but the ability

to deliver this is constrained by the need for service delivery in parallel. The obstetrician has recently transferred to a GoTL direct contract.

A safe and clean delivery program has been delivered and supervision has been provided at district level as far as possible within time constraints. This has resulted in more nurses and midwives being available as skilled birth attendants. Three hundred have received training but not all have been certificated as yet.

WHO is working to establish a regulatory framework for the registration of health professionals. This involves working with the Timor-Leste Medical Association and agreeing standards for accreditation. Any capacity building support which included documentation (portfolio/logbook) of learning and competence acquisition would complement this. A further key role for the WHO will be in working with the MoH to develop clear short, medium and long term human resources and workforce plans. Initial mapping of existing resources is currently taking place for this purpose.

WHO also, through its normative role, has a significant potential role in developing standard treatment guidelines. WHO is willing to work in partnership in establishing guidelines and protocols which can inform the curriculum for the post graduate Diploma. Recognising the wish of the Dean of the Medical School to deliver the Diploma course in English, WHO has an e-learning package of English for Health which they could make available. WHO has provided all referral hospitals with the “Blue Box” library of guidance and procedures (in Portuguese). These are evidence based and internationally verified and could form the basis for the local clinical protocols/guidelines and the curriculum. They are also available in English.

St John of God, who are primarily privately funded, have a team of 9 nurses based at the national hospital including in the paediatrics, emergency, intensive care, and neonatal departments. A very experienced nurse has recently arrived whose sole focus will be on ensuring nursing quality and the development of standard treatment guidelines for nurses.

1.4 ATLASS Program History and Key Lessons Learned

AusAID have funded the Royal Australasian College of Surgeons (RACS) to provide support for the delivery and development of specialised clinical services in Timor-Leste since 2001.

During the period after the separation from Indonesia, this was at the request of the interim MoH and the United Nations Transitional Administration in East Timor. Assistance was first delivered through the Australia East Timor Specialist Services Project (AETSSP) using a combination of long term in-country advisers (LTA) and short term visiting specialists and teams. As was appropriate in an extremely resource-limited post-conflict setting, AETSSP prioritised service delivery ahead of capacity development. Just over 10% of the AUD 2.9 million budget was allocated to training and capacity development, while the balance supported in-country and visiting specialist services.

On conclusion of AETSSP in 2006 and at the request of the MoH, AusAID and RACS support for clinical services transitioned to a more country-led model through the *Australia Timor-Leste Program of Assistance for Specialised Services 2006–12* (ATLASS), with a budget of AUD 9.3 million over 5.5 years (including two six month cost extensions).

ATLASS represented a progression towards a more sustainable, country-led approach. In addition to service delivery, it has focused on in-country mentoring and training for Timorese doctors and some nurses (primarily nurse anaesthetists) and fostering international specialist training opportunities. About 10% of the overall budget was allocated to direct scholarship support and short courses, while an estimated 25% was allocated to in-country mentoring and training.

Key achievements of the program to date include:¹⁵

¹⁵ All from ATLASS program report ‘ATLASS Key Achievements as at February 2012’, submitted to AusAID on 22/2/12.

- Training of the first Timorese ophthalmologist and anaesthetist and first two general surgeons who have now returned and are working in the national public hospital.
- 95% of all operations undertaken through ATLASS in 2011 were done or assisted by one or more surgical trainees, an increase from 51% at the beginning of ATLASS.
- Considerably improved anaesthesia services through the training of 21 Timorese nurse anaesthetists - every hospital in the country now has at least one nurse anaesthetist ensuring safe delivery of basic anaesthesia in the districts. Over 95% of all anaesthetics in Timor Leste are now given by nurse anaesthetists trained under AETSSP and ATLASS. 24% of anaesthetics administered at the national hospital are for mothers undergoing caesarean sections (the vast majority of which are emergency c-sections).
- Increased access to sub-speciality services through short-term visiting teams across a wide range of specialities:
 - Increased geographic coverage of visiting teams has improved access for remote communities to specialist medical services (70% of all visiting teams now deliver in the districts).
 - Since 2001, over 45,600 patients have been examined by the visiting teams and over 8,700 patients have received treatment.

The Government of Timor-Leste has specifically sought on-going support from RACS, and a strong existing relationship exists between RACS and the Ministry of Health, the National University of Timor-Leste, and the Cuban Medical Brigade. The ATLASS program has a strong Australian brand and has been cost-effective in that RACS is able to leverage its networks in Australia so that some services are provided pro bono, and equipment is often donated.

1.4.1 Key Lessons Learned

The following key lessons learned largely reflect the findings of the Independent Progress Review of ATLASS completed in late 2010, as against AusAID Quality at Entry criteria.

Relevance

ATLASS was designed and implemented in 2006 at the direct request of the Minister of Health. In the context of post-conflict Timor-Leste, there is still limited national capacity to deliver services for treatable surgical conditions. The need for secondary services of a high quality at the national and district levels in the health system therefore remains highly relevant. This is emphasised in the National Health Sector Strategic Plan which clearly recognises the critical role of specialised services in hospital settings and in supporting referral pathways.

Effectiveness and Sustainability

ATLASS has been effective in providing a high quality and continuous level of clinical cover for specialised services in Timor-Leste. The program has provided pre-service and in-service training for almost all of Timor-Leste's nurse anaesthetists, who play a critical role in improving health outcomes at national and district levels – particularly in support of emergency obstetric care. ATLASS has been less effective in building the capacity of its surgical trainees to sustainably perform their functions. While some factors are beyond the program's control, the difficulties in

recruiting LTA surgeons for extended period to provide consistent mentoring and guidance has negatively impacted on program effectiveness. RACS have strategies in place to manage this risk and the addition of two new LTA positions under ATLASS II should allow LTA to have a more manageable workload and better in-country support mechanisms.

ATLASS continues to play a significant role in the provision of surgical and anaesthetic services at the National Hospital. However, it is likely the very high quality of ATLASS service delivery is having the unintended effect of displacing other national and international efforts to appropriately share the workload – ie, patients are ‘voting with their feet’ and seeking ATLASS services. A much increased focus in ATLASS II on the development and implementation of standard treatment guidelines and protocols to ensure quality service provision by all providers should help to mitigate this issue.

ATLASS has not routinely monitored the contributions of (for example) nurse anaesthetists to district-level health service delivery, limiting the opportunity to tell a more comprehensive story of ATLASS achievements. Quantitative and qualitative indicators which will allow the tracking of these kinds of contributions will be included in ATLASS II’s M&E framework, and periodic inputs by an M&E specialist will support the RACS program team (and MoH counterparts) to better gather, interpret and use data.

ATLASS has played an important role in strengthening the capacity and clinical skills of six surgical and one anaesthetic trainee. During program implementation 74% of ATLASS assisted or performed surgical operations and 98% of anaesthetics administered were performed or assisted by a trainee.¹⁶ For surgical operations, those which were assisted or performed by an ATLASS trainee significantly increased from 51% in 2006 to 91% in 2010. However, there is a reasonable difference in the spectrum of a trainee assisting an operation and being competent to perform an operation independently – which has not been systematically captured in program reporting.¹⁷ A more systematised use of logbooks (to sign off on assessed competences and experience) and a stronger emphasis by LTA on mentoring, especially of Diploma graduates, will help to address this issue.

Efficiency

Implementation progress has been hampered on occasion by difficulties in recruitment of long term in-country specialists (LTA). This has impacted on program effectiveness through a lack of continuity to fully support and mentor the Head of the Surgical Department and surgical trainees. A minimum period of continuity for one-year is preferable with the ideal being a two-or-three year appointment. RACS is putting in place recruitment strategies to address this issue.

One of the main challenges in increasing the overall number of formally accredited specialists through ATLASS has been the difficulty trainees have faced with English language requirements. Even though overseas scholarships will not be a part of ATLASS II, if the Diploma courses are delivered in English as planned then participants will likely require language training. RACS have been examining the possibility of getting an Australian volunteer to assist with this, and using the WHO developed modules on English language for clinicians has also been explored.

The combination of changes in the human resource context and joint Government health priorities has diminished the relevance and efficiency of ATLASS in its current form. For example, short term advisers (STA) have been a valued part of the ATLASS program. However, there has been an increasing emphasis in recent years on capacity building and undertaking work in the

¹⁶ ATLASS Surgical and Anaesthesia Logbooks, 7 April 2010.

¹⁷ In particular, logbook data from October 2006 to June 2007 did not systematically code the different levels of trainee involvement in surgical operations.

referral hospitals. Whilst it has been possible to build local capacity in some specialities, notably ophthalmology, it is judged as unlikely that all specialities currently involved could establish a viable local service. This reflects not only the need for suitable trainees but also the problems with available commodities, equipment and other support services. Training a single sub specialist has been possible in some areas (e.g. plastic surgery with an emphasis on cleft lip and palate) but their ability to maintain their clinical competence in all sub specialties given the relatively small population base generating demand for highly specialised services is uncertain. Whilst there will be a limited ongoing need for very specialised services (eg paediatric cardiac surgery), it seems unlikely that these will be either economically or practically deliverable using Timorese surgeons in the long term. The demand for these services is likely to be relatively limited given Timor-Leste's small population size, so it will not be possible for a specialist to undertake the optimum number of procedures to maintain competence, the cost per case will be relatively high, and the impact on key NHSSP indicators (eg a reduction in maternal and infant mortality) and the health of the population as a whole relatively low. Limited post-operative care is available for complex operations.

The ATLASS program has incorporated managing a number of scholarships. Whilst some trainees have been successful, there have been issues concerning willingness to travel, ability to pass examinations and recruitment. This issue has been closely examined in the present design.

Coordination between international medical missions at the national hospital remains problematic and poses a serious medical risk. Although cooperation and collaboration is reasonably well fostered between individual specialists, language barriers and unclear roles preclude the establishment of a more harmonised system. If the MoH desires ATLASS to lead on establishing quality standards and protocols, it needs to clearly communicate this to all parties and support this process to take place. On the part of ATLASS, greater information sharing of its activities with MoH and hospital management would improve MoH planning. This will be facilitated by the involvement of ATLASS II in the MoH's own Joint Annual Review process.

Gender Equality

The program's contribution to service delivery has benefited male and female patients in a relatively balanced and equal manner:

- 1258 (58%) male patients and 925 (42%) female patients benefited from surgical operations provided by ATLASS LTA / trainees
- 991 (44%) male patients and 1267 (56%) female patients benefits from anaesthetics administered by ATLASS LTA / trainees¹⁸

ATLASS has also made a valuable contribution to improving access to emergency obstetric care. At the national hospital approximately one-fifth of anaesthetics administered by ATLASS were for mothers receiving caesarean sections.¹⁹ At district referral hospitals 21 nurse anaesthetists who receive in service-training by ATLASS have provided critical assistance in support of emergency obstetric care.²⁰ For example, in 2009 three nurse anaesthetists at Maliana referral hospital were solely responsible for providing anaesthesia services in support of 38 caesarean sections.²¹

However, all the nurse anaesthetists and trainee surgeons under ATLASS are male. As cohorts of the Cuban-trained Timorese doctors (half of whom are female) go through the Diploma course, an

¹⁸ These statistics are drawn directly from ATLASS LTA Logbooks as at 5 May 2010.

¹⁹ As at 5 May 2010, 493 or 22% of total anaesthetics administered by ATLASS supported caesarean sections.

²⁰ As data on caesarean sections assisted by ATLASS trained nurse anaesthetists at district referral hospitals are not captured in ATLASS M&E systems, it is impossible to quantify this contribution.

²¹ Atingimento Servico Hospitalares e encaminhamento 2009 Hospital de Referencia Maliana, February 2010, p17.

increasing number of females with skills in basic secondary services will be supported by the program.

Monitoring and Evaluation

The monitoring and evaluation (M&E) systems for ATLASS are of less than adequate quality.²² Reports provide detailed information on implementation progress and the quantity of outputs delivered, but judgements on their quality are difficult to make. Ongoing monitoring of (for example) the nurse anaesthetists would provide a clear picture of the ATLASS contribution at district and referral hospitals, particularly where it relates to maternal health outcomes. Monitoring of all operations at the National Hospital would demonstrate the significance of ATLASS' contribution to the overall caseload, and provide an opportunity to further strengthen MoH information systems. Progress reports do not systematically report on individual capacity improvements (either to perform operations more independently or perform more complex operations), nor do they adequately explore patient outcomes. Instead they aggregate process measures – such as “proportion of operations done or assisted by a trainee”.

A robust M&E framework will be a key performance-linked deliverable at inception for ATLASS II, and periodic inputs by an M&E specialist will support the RACS program team (and MoH counterparts) to better gather, interpret and use data.

1.5 Design Process

This design responds to a request to AusAID from the Timor-Leste Ministry of Health for the continuation of basic secondary services provision, an independent progress review of ATLASS in 2010, and a March 2012 independent review of ATLASS based on a needs assessment and gaps analysis.

Both reviews' key recommendations were that the new program addressed maternal and neonatal health outcomes much more strongly, and that it support junior Timorese doctors in developing their basic secondary services competencies.

The design also takes into account findings from similar programs in the Pacific, notably the Pacific Islands Project (PIP) and Strengthening Specialised Clinical Services in the Pacific (SSCSiP).

A first in-country mission was undertaken between 19 September and 3 October 2011. The purpose of the visit was to assess the feasibility of various design options for continued Australian support and to explore relevant partner government systems and the MoH policy and governance context in which a new program would operate.

Key issues addressed during the visit included the effectiveness of working with partner government systems, contributing to the strategic objectives of the MoH NHSSP, and harmonisation of Australian inputs and activities in clinical service delivery and workforce development with those of other donors and technical partners.

Consultations included: senior MoH decision-makers; members of the in-country ATLASS and AusAID teams; Timorese clinicians (including recent graduates through the Cuban system); the Director of the Cuban Medical Brigade; international non-government organisations (iNGOs) involved in strengthening community level maternal and child health care, including through outreach (SISCa); the UNTL; and visits to the referral hospitals in Oecusse, Maliana and Baucau.

²² This assessment is based on the value of the program, legacy of the program (in its second phase), and relatively straight-forward nature of interventions. Responsibility also lies with AusAID and the PRET. As early as July 2007 (refer PMC Minutes) AusAID indicated the need for greater reporting against outcomes. Yet it has continued to accept progress reports which have not addressed this issue, and only recently provided guidance on a more appropriate report format. While PRET has provided continual advice on improving M&E systems, changes to the program logic and M&E framework have been minimal and not addressed fundamental problems with the design logic which was focused too heavily on inputs and less on behaviour change of its key beneficiaries.

The in-country consultations were followed by a detailed design workshop with RACS at their headquarters in Melbourne on 5-6 October.

The ATLASS II design proposed after this mission was not passed at peer review on 31 October 2011, with key concerns raised around issues of relevance, analysis, and sustainability. It was agreed to extend the ATLASS program for six months, until 30 June 2012, to allow a further independent assessment of possible future directions for the program to be completed.

A second in-country mission took place in March 2012. The team leader was asked to prepare an independent issues paper that addresses key topics identified in the peer review process, and to attempt to achieve consensus on both short and long term ways of achieving the desired outcomes and outputs together with the transition methodology. The executive summary of the issues paper can be found at Annex 2.

2 Design Strategic Directions

2.1 AusAID Policy and Strategic Directions

The key development objectives for Australia's investments in health as outlined in the aid program's new policy framework 'An Effective Aid Program for Australia: Making a real difference – Delivering real results' are to save the lives of poor women and children through greater access to quality maternal and child health services (for example, skilled birth attendants and midwives), and supporting large scale disease prevention, vaccination and treatment.²³ Australia is currently the largest bilateral health donor in Timor-Leste, but immense challenges remain in the sector, including where governance is concerned, and there is significant scope to scale up support further in key areas.

Supporting the development of the health work force, a strong focus on improving maternal and child health outcomes and addressing the other health-related MDGs, and strengthening the overall health system are key elements of the Australian aid program's health sector policy (*Saving Lives*). This design, for ATLASS Phase II, also responds to the agreed priorities in the Australia-Timor Leste Strategic Planning Agreement for Development.

Australia, with an expanding budget and larger health team on the ground, as well as a decades' worth of lessons learned from health investments in the country, is uniquely placed to support the Government of Timor-Leste to make progress against key health indicators. Our support in future will be even more closely focused in support of MDGs 4 and 5, i.e. reducing child and maternal deaths and improving maternal, neonatal and under-five health, including supporting universal access to reproductive health services as per MDG 5. To achieve this, AusAID will support an increasing focus on the districts.

Where it relates to support for basic secondary care, AusAID does not currently have an overarching policy framework or guidance in place,²⁴ however funding is provided for secondary services programs in a number of Pacific countries, and in PNG. In the past, a similar program was supported in Indonesia. A number of these are delivered through RACS.

The key areas of support proposed for ATLASS II are twofold:

- Supporting the improvement of maternal and child health services, specifically in areas such as ensuring a continuum of care and strengthening comprehensive emergency obstetric and paediatric care. This will complement other AusAID-funded programs at the primary care level which provide ante natal care services and promote referrals to skilled birth attendants.
- Developing the basic secondary care capacity and skills of a cohort of the Cuban-trained Timorese doctors in areas including obstetrics, paediatrics, anaesthetics, general surgery and orthopaedics (with an emphasis on trauma and mitigation of disability) recognising that these services, especially where delivered in referral hospitals, will benefit poor women and children.

2.2 Government of Timor Leste and Ministry of Health Policy and Strategic Directions

The National Health Sector Strategic Plan (NHSSP) 2011-30 has recently been launched and priorities for meeting health needs are identified. For the short term these are primarily focussed on the achievement of the Millennium Development Goals.

²³ An Effective Aid Program for Australia: Making a real difference – Delivering real results, 2011

²⁴ It is planned that this will be developed over the course of 2012.

This design seeks to align ATCLASS II closely with the NHSSP by contributing to the achievement of the relevant NHSSP goal, i.e.:

To have a comprehensive primary and hospital care service with good quality and accessible to all Timorese people.

This, in turn, contributes to the achievement of the health-related MDGs and the relevant SDP goal, i.e. *by 2030, East Timor will have a healthier population as a result of comprehensive, high quality services accessible to all Timorese people.*

The program will contribute primarily to the following NHSSP objectives:

- *To meet human resources needs to ensure efficient and effective health service delivery at each level of care*
- *To provide accessible secondary health care services that deliver a minimum package of hospital services at district and strategically identified regions, and to ensure access to equitable, efficient, high quality and cost effective tertiary health care services in Timor-Leste able to cater for the needs of population in a manner that is both affordable and sustainable*
- *To improve maternal and newborn health through affordable, equitable and high quality continuum of care services*

Consultations with the Minister for Health in late 2011 and follow-up discussion with the Ministry of Health's Director General and five of his directors in March 2012 confirmed that the provision of primary care and basic secondary services remained the priority. Considerable emphasis was placed on capacity building in the workforce including the development of the post graduate Diploma to provide Timorese doctors, who have received basic training under the Cuban system, with skills in a basic range of surgical procedures. It was confirmed that basic services, particularly for obstetrics, were a priority.

The NHSSP does not yet incorporate a basic services package although a draft was originally developed in 2003-4 and updated in 2008, which was evidence based and incorporated internationally agreed cost effective interventions. The NHSSP does, however, identify priority health issues and maternal health is identified as a priority.

"To improve maternal, ENC and newborn health through affordable, equitable and high quality continuum of care services" (NHSSP p46)

This reflects the high maternal mortality ratio (557 per 100,000 as at 2010).

Indicators for child health are also poor and the GoTL has set challenging targets for the period to 2030:

- reduction in under 5 mortality from 61 to 27 per 1,000
- reduction in infant mortality from 44 to 21 per 1,000 live births.

Whilst the NHSSP identifies child health as a major priority, the focus is rightly at primary level supporting Integrated Management of Childhood Illness (IMCI) and immunisation. However, there is also a need for a secondary specialised paediatric service recognising the needs of newborns (50 percent of under-five deaths are in the first week of life) and the number of children hospitalised with communicable diseases (dengue, malaria), diarrhoea, acute respiratory infections and so on.

The NHSSP does not identify the need for basic surgical services at secondary level as a specific priority but does include staff to deliver these services in forward projections. The section of the NHSSP which relates to future staffing of hospitals identifies the future need for surgeons, both general and specialist (including obstetrics and orthopaedics) with a roadmap for achievement by 2030. There are no financial projections for either developing these cadres or costings for future employment.

Some services (for instance, paediatric cardiology) may never be economic or deliverable with local capacity. This is a highly specialised service and a population of one million with a birth rate of approximately 44,000 per annum is unlikely to generate sufficient work for a full time team. GoTL may need to make a decision around what level of service can be funded as part of the basic services package and how very specialised services can be provided sustainably in the future. The MoH are aware that continuing provision of services which have not got long term sustainability raises unrealistic expectations.

The National University of Timor-Leste (UNTL) Faculty of Medicine and Health Sciences is in the process of commencing the design of a curriculum for a number of post graduate Diploma modules. These will include modules in obstetrics, anaesthetics, general surgery, orthopaedics, paediatrics and general medicine. The Dean has requested AusAID support through RACS in:

- developing appropriate evidence based guidelines and protocols
- designing the curricula
- supporting the training of UNTL lecturers (training of trainers)
- delivering modules and individual lectures
- supervising and mentoring trainees particularly for practical attachments
- providing ongoing support to graduates and a “second opinion”, largely through ‘e-supervision’ eg tele/videoconference.

The Government of Timor-Leste (GOTL) budget for the health sector in 2012 is around USD 44.4 million. The MOH currently allocates an estimated USD 2 million annually for out-of-country referrals for specialist medical treatment or consultations where services are not available in country, though this is unlikely to fully meet demand.²⁵

²⁵ Anecdotal evidence suggests this is primarily for oncology care.

3 Description of the New Program

3.1 Name of the new program

ATLASS already has a profile and recognisable Australian identity in Timor-Leste. It is therefore proposed that the new program is simply called *ATLASS Phase II*, with the acronym referring now to the Australia Timor-Leste Program of Assistance for **Secondary** (rather than Specialised) Services.

3.2 Duration of the program

It is proposed that the ATLASS Phase II will run for four years – i.e. from 1 July 2012 to 30 June 2016.

3.3 Program Goals, Outcomes and Deliverables

Higher Level Development Goal (from NHSSP)

- East Timor will have a healthier population as a result of comprehensive, high quality services accessible to all Timorese people.
 - Maternal mortality ratio decreased
 - Infant mortality rate decreased

Intermediate Development Goal

- National and district hospitals provide selected basic secondary services (obstetrics, anaesthesia, general and orthopaedic surgery, and paediatrics) in accordance with agreed standard treatment guidelines (STGs) and protocols.
 - All hospitals provide Comprehensive Emergency Obstetric and Neonatal Care (CEmONC)
 - Caesarean section rate increased progressively to between 5 and 15%

End of Program Outcomes

- Approximately 18 existing Timorese surgeons competently provide appropriate services (obstetrics, paediatrics, anaesthetics, general surgery and orthopaedics) with on-going supervision, including at district referral hospitals.
- UNTL lecturers in the Faculty of Medicine competently deliver Diploma modules based on evidence and nationally agreed standard protocols in obstetrics, paediatrics, anaesthesia, general surgery and orthopaedics.
- Approximately 24 – 30 Diploma graduates competently provide appropriate services in obstetrics, paediatrics, anaesthetics, general surgery and orthopaedics (with an emphasis on trauma and mitigation of disability), including at district referral hospitals.

Key Program Deliverables/Outputs

- Appropriate standard treatment guidelines (STGs) and protocols in obstetrics, paediatrics, anaesthesia, general surgery and orthopaedics.
- Appropriate guidelines for ‘Grand Rounds’, maternal and neo-natal mortality reviews and near-miss reviews.
- Appropriate evidence-based post-graduate Diploma curricula, and effective lecturer training in obstetrics, paediatrics, anaesthetics, general surgery and orthopaedics (with an emphasis on trauma and mitigation of disability), reflecting standard treatment guidelines and protocols in line with international best practice.

- Effective supervision and mentoring by both long and limited, targeted short term technical advisors to build competence and confidence in existing Timorese surgeons and Diploma graduates.
- Effective direct service delivery (as a part of teaching) by LTA particularly in obstetrics and paediatrics, delivered on a sliding scale from approximately 30% of LTA time in year one to 10% in year four.
- In areas where Short Term Technical Assistance (STA) will continue for the short term (urology; plastic & reconstructive services), a transition from service delivery to high quality mentoring and e-supervision.

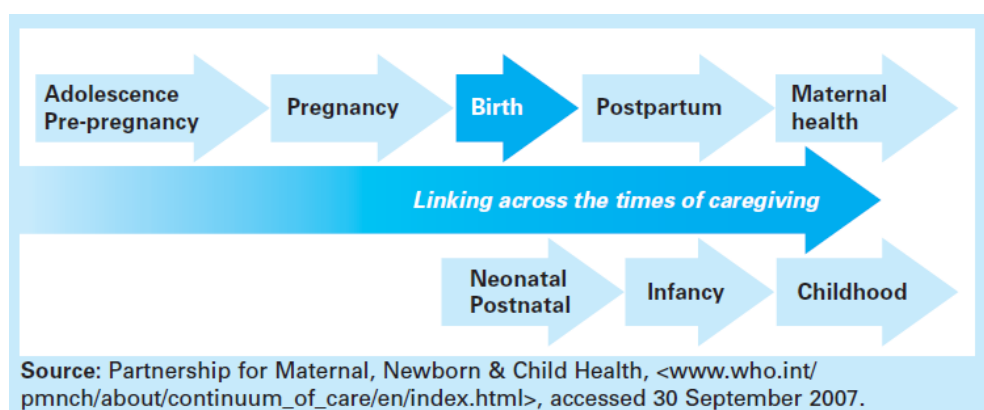
3.4 New Program Description

3.4.1 Transition to a focus on maternal and newborn care

There is good evidence both from the experience of having the RACS LTA anaesthetist in Timor-Leste for more than six years and from international experience that long term placements have the potential for the greatest impact on capacity building. LTA clinicians can develop key relationships with stakeholders and deliver both formal training but also supervision and mentoring. The opportunities to provide consistent input to training courses and to strengthening capacity at the district level are more numerous.

It is therefore proposed that Australia continues to support the GoTL through the provision of a program which includes the **on-going provision of long-term in-country specialists** in anaesthesia, general surgery, and orthopaedics. The program will also greatly benefit from the **addition of long-term in-country specialists in obstetrics²⁶ and paediatrics**, given the significant need for support to maternal, newborn and child health services at the secondary level. These specialties meet prioritised needs as identified by the NHSSP and will support the establishment of basic surgical services in all hospitals, with an emphasis on women and children. They will help to ensure the continuum of care for mothers and children is available, as per Figure 1 below. They will complement initiatives to encourage early referral and skilled birth attendance. Provision of these key services will mean that ATLASS II's focus on MNCH will be somewhere between 50 and 60% of the program.

Figure 1: The Maternal, Newborn and Child Health Continuum of Care



Whilst recognising that service delivery will form a continuing proportion of the input of LTA, this should decrease as counterparts develop competence. ATLASS has shown progress in this regard

²⁶ Where possible the obstetrician should be female given the clear message in the Timor-Leste Healthcare Seeking Behaviour Study that the lack of female clinicians (particularly in the areas of sexual and reproductive health) is a significant barrier to women seeking healthcare services.

and lessons learned can be built upon. ATLASS II proposes a much stronger emphasis on LTA supporting the following areas:

- Further development of national **clinical care pathways, protocols and standard treatment guidelines** to be adopted by the MoH and harmonised with the work undertaken by Health Alliance International, UNTL and by UNFPA etc. The obstetric care pathway would be based on the continuum of care promulgated by WHO and the Partnership for Maternal, Newborn and Child Health. It would address the current gaps in this continuum around CEmONC and neonatal care, particularly resuscitation and premature births.
- To support the implementation of these as '**standard operating procedures**' which are capable of being audited, this would be supported by the introduction/expansion of 'Grand Rounds', **maternal and neo-natal mortality reviews** and near-miss reviews.
- **Development of the curriculum** for modules in anaesthetics, orthopaedics, general surgery, obstetrics and paediatrics as part of an 18 month post graduate Diploma course planned by UNTL. In establishing the Diplomas, the LTA will have access to short-term advisers with specific curriculum development skills.
- Support to the **delivery of this Diploma at UNTL** – including support to training of UNTL lecturers - and acting as clinical tutors in hospitals and other facilities. If the MoH (or the Ministry of Education as the overseers of UNTL) decides upon the need for external examiners for Diploma courses, this could be facilitated through ATLASS II.
- Ongoing **supervision and mentoring of doctors** who are or have undertaken the Diploma, including accrediting their experience in log books or portfolios to demonstrate competence.

LTA will also have access to funding to support their own **continuing professional development** throughout the program. This is essential to ensure that the LTA maintain their professional registration but also to ensure familiarity with new research and lessons learnt worldwide. It could include attendance at annual conferences, access to journals, and so on.

ATLASS has already attempted to establish a number of clinical care pathways and protocols (based on internationally-accepted guidelines), together with multi-disciplinary audit, morbidity and mortality meetings. RACS reports indicate that gaining acceptance of protocols is challenging, made worse by local staff turnover. The use of guidelines needs continuous reinforcing and verification by audit. Support can best be provided by LTA with leadership by the MoH and support from WHO both in developing clinical protocols and in modelling their use.

3.4.2 Transition from Short Term Technical Assistance

It is proposed that STA be progressively phased out from the new program. (See 4.4 below). Where there has been a local counterpart identified and capacity building in a basic secondary surgical service has taken place (ie in the instances of urology and plastic & reconstructive surgery in respect of cleft lip and palate in infants), this relationship should be maintained and supplemented with **regular e-supervision using telephone, Voice over Internet Protocol (VOIP, eg Skype) or video conferencing** (UNTL has a video conferencing facility), complemented by the use of clinical logbooks. Based on this criteria, ATLASS II should transition out STA in paediatric cardiac surgery, ophthalmology, orthopaedic surgery, paediatric surgery and ENT/audiology over year one, with plastic & reconstructive services and urology to follow in year two. See Section 3.4.6 for further explanation.

3.4.3 Support to the Diploma courses at UNTL

ATLASS II will have a very significant focus on development of the curriculum for, and delivery of, quality modules in anaesthetics, orthopaedics, general surgery, obstetrics (specifically

CEmONC) and paediatrics as part of an 18 month post graduate Diploma course planned by UNTL. This will include an emphasis on training of trainers to deliver the courses at UNTL over the longer term. This will ensure the development of a cohort of competent and experienced Timorese doctors to meet the needs for basic secondary care in a realistic timeframe. It is envisaged that each cohort number approximately 12 – 15 trainees, many of which will have originally trained in Cuba. In the short-to-medium term, this will have a significant positive impact on the **availability and quality of key secondary services in district referral hospitals**, supported by on-going supervision and mentoring of Diploma graduates by **ATLASS II LTA who will undertake rotations in the referral hospitals** following the deployment of Diploma graduates.

3.4.4 Scholarships

While it is not envisaged that the ATLASS program should award any overseas scholarships in the immediate future it is suggested that this is revisited during the **Independent Mid-Term Review** with a particular emphasis on examining whether there are any functions which look as if they will lack cover once the Cuban Brigade withdraws. Successful completion of the Diploma course could also form part of the selection criteria for possible future overseas specialisation.

3.4.5 Mid Term Review

It is envisaged that the Mid-Term Review will take place in year two (2013-14).

3.4.6 Complementary Support

It is recognised that both for training and service delivery purposes, surgical commodities and equipment/instruments will be required and that an increased workforce will put increasing pressure on both these areas. This will require on-going discussion with the Ministries of Health and Finance to ensure adequate budget allocations to these areas. It is proposed that Australia could explore further support to the procurement of surgical commodities and possible support to biomedical equipment maintenance through other channels (eg NHSSP-SP and/or a new program to be designed in 2012).

ATLASS has demonstrated a clear ability to train nurses through the nurse anaesthetist program. However, as mentioned previously, it is proposed ATLASS II focus on the development of a cohort of competent and experienced Timorese doctors to meet the needs for basic secondary care. Recognising the importance of these services, Australia will explore further support to the training of nurses – including for pre and post-operative care - through the planned new third AusAID health program currently being designed.

Ophthalmology has, in the past, been identified as a priority for ATLASS and has also been supported by AusAID under the Vision 2020 initiative. RACS has been the lead for Vision 2020²⁷ in Timor-Leste which has now resulted in a Timorese ophthalmologist being trained and delivering services. Discussions are currently in hand to design the continuation of Vision 2020 including provision of surgical services and a range of other capacity building and service interventions. Eye services need a certain amount of equipment for diagnosis as well as treatment. It will be important for GoTL to make a decision what services can realistically be delivered in all referral hospitals. Whilst recognising the importance of basic eye surgery at secondary level, any significant activity under a future ATLASS program runs the risk of duplicating what will be supported by Australia through Vision 2020 and it is therefore proposed that all support to ophthalmology be delivered through Vision 2020.

3.5 ATLASS II transition plan

As noted in section 3.2, is proposed that the ATLASS Phase II will run for 4 years – i.e. from 1 July 2012 to 30 June 2016. However, Phase II should be viewed as part of a continuing, longer term commitment to strengthening the competence of the national clinical work force and the

²⁷ In partnership with the Fred Hollows Foundation, New Zealand.

delivery of basic secondary care (especially comprehensive emergency obstetric care) in rural districts. Subject to performance and Government of Timor-Leste stated priorities over the course of 2012 – 2016, a subsequent four-year phase commencing in 2016 is envisaged. The vision of the draft NHSSP is ambitious and is itself optimistic, taking a 15-20 year view of the time it will take to develop the medical and broader health work force. AusAID is committed to supporting this over the long term (i.e. to at least 2020).

Key **activities** (nb not outcomes) envisaged for each year of ATLASS II can be characterised as follows:

Year One (July 2012 – June 2013)	Year Two (July 2013 – June 2014)	Year Three (July 2014 – June 2015)	Year Four (July 2015 – June 2016)
<ul style="list-style-type: none"> • LTA placements for anaesthetist, general surgeon, orthopaedic surgeon, obstetrician and paediatrician commence. Service delivery undertaken by LTA a maximum of 30% of the time. • LTA support development and implementation of standardised clinical guidelines and protocols. • LTA support design and delivery of a Diploma course for recently qualified Timorese doctors in order to build their capacity in basic secondary care in the LTA 	<ul style="list-style-type: none"> • LTA placements for anaesthetist, general surgeon, orthopaedic surgeon, obstetrician and paediatrician continue as required. Service delivery undertaken by LTA a maximum of 20% of the time. • LTA support delivery of a Diploma course for recently qualified Timorese doctors in order to build their capacity in basic secondary care in the LTA areas. • On-going training of UNTL Trainers delivering the Diploma courses by LTA. • On-going supervision and mentoring of recently qualified Timorese doctors by LTA, 	<ul style="list-style-type: none"> • LTA placements for anaesthetist, general surgeon, orthopaedic surgeon, obstetrician and paediatrician continue as required. Service delivery undertaken by LTA a maximum of 20% of the time. • LTA support delivery of a Diploma course for recently qualified Timorese doctors in order to build their capacity in basic secondary care in the LTA areas. • On-going training of UNTL Trainers delivering 	<ul style="list-style-type: none"> • LTA placements for anaesthetist, general surgeon, orthopaedic surgeon, obstetrician and paediatrician continue as required. Service delivery undertaken by LTA a maximum of 10% of the time. • LTA support delivery of a Diploma course for recently qualified Timorese doctors in order to build their capacity in basic secondary care in the LTA areas. • On-going training of UNTL Trainers delivering the Diploma courses by LTA. • Second cohort (12 – 15 doctors) completes Diploma course. • On-going

<p>areas.</p> <ul style="list-style-type: none"> • Training of UNTL Trainers delivering the Diploma courses by LTA. • Transition out STA in paediatric cardiac surgery, ophthalmology, orthopaedic surgery, paediatric surgery and ENT/audiology over year one. • Transition STA in plastic & reconstructive surgery, and in urology, to a capacity building and mentoring role, with an emphasis on distance support • Doctors currently studying for overseas specialisations under ATLASS I continue as required. 	<p>with an emphasis on those who are of have undertaken the Diploma.</p> <ul style="list-style-type: none"> • Continue to transition STA in plastic & reconstructive surgery, and in urology, to a capacity building and mentoring role if required, with an emphasis on distance support. • Doctors currently studying for overseas specialisations under ATLASS I finish studying. • Independent mid term review at the end of year two. 	<p>the Diploma courses by LTA.</p> <ul style="list-style-type: none"> • First cohort (12 – 15 doctors) completes Diploma course. • On-going supervision and mentoring of recently qualified Timorese doctors by LTA, with an emphasis on those who are of have undertaken the Diploma, including rotations in the district referral hospitals by the LTA to complement the Cuban Brigade. 	<p>supervision and mentoring of recently qualified Timorese doctors by LTA, with an emphasis on those who are of have undertaken the Diploma, including rotations in the district referral hospitals by the LTA to complement the Cuban Brigade.</p> <ul style="list-style-type: none"> • Independent Completion Report and design of follow-on phase (to commence July 2016).
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4 Implementation Arrangements

4.1 Rationale for continued engagement of RACS as implementing partner

RACS' primary role, as confirmed in its mandate, relates to training. RACS has worked in Timor-Leste since 2001 and has undertaken work through a number of modalities. It has facilitated RACS members to visit for short term work involving both service provision and teaching but has also employed LTA in a number of specialties. Whilst most of these have been surgeons, some have been from other branches of medicine.

RACS has developed systems and procedures to support LTA including selection, vetting, registration in Australia, indemnity insurance, pre travel briefing, induction, ongoing support and opportunities for professional development. It has a well-developed Code of Conduct²⁸ and an international group who meet regularly to exchange experience and good practice.

RACS has good relations with the other specialist colleges and can work with them to find suitable candidates for the proposed LTA positions in obstetrics and paediatrics, as it has done in the Pacific. It may also source through international bodies such as the International Federation of Gynaecology and Obstetrics or through medical journals read internationally (the British Medical Journal or similar).

When in country, RACS surgeons are undertaking to both deliver service and build capacity and have increasingly undertaken some work in decentralised locations. Many of them have close ongoing relations with Timorese colleagues built over time. In addition, they have developed relationships of trust with the MoH and the UNTL. A recent independent review concluded that RACS long-term in-country surgeons are adhering to evidence based approaches and attempting to introduce guidelines and protocols. The new program will place even more emphasis in this area and monitoring and evaluation will increasingly need to be output and outcome focussed rather than process focussed.

RACS has proven to be a responsive partner for AusAID. Whilst the proposed program would shift from a high service delivery content, much delivered by STA, to a new modality with an increase in capacity building and clinical policy development, mainly using LTA, this is in line with their legal mandate and the work they undertake in Australia and the Pacific region. The recent independent review noted that there may be other bodies capable of employing LTA but that it seems unlikely that an organisation could be found which is as cost effective or has the institutional knowledge of Timor-Leste.

4.2 Governance

The proposed governance structure is aligned very closely with existing and evolving mechanisms for health sector coordination in Timor-Leste.

The NHSSP proposes a **Joint Annual Review (JAR)** as the annual forum for MoH, central agencies and DPs to review the performance in the health sector (including DP inputs) against agreed goals and targets and engage in higher level policy dialogue. It is proposed that program performance and the next year's budget and workplan be presented each year to the JAR as a standing agenda item, which will support overall consistency and alignment with GoTL priorities, strategies and budgets, harmonisation with other relevant DP activities, and mutual accountability for achievement of outputs and outcomes.

To undertake a more detailed program review, a **Program Management Committee (PMC)** will be necessary. The role of the PMC will be: to undertake internal review and performance assessment, and to review and endorse draft annual work plans and budgets and the annual reports to be shared at the JAR. If this is not feasible, the annual work plans and annual reports may alternatively be submitted to the Council of Directors for approval. It is proposed that the PMC

²⁸ Available at: http://www.surgeons.org/media/346446/pos_2011_02_24_code_of_conduct_2011.pdf

meets annually, approximately 2-4 weeks before the JAR, and is chaired by a senior MoH representative (either the Director General, Vice Minister or Minister). The Dean, Faculty of Medicine and Health Sciences, UNTL, will also attend. Where possible, representatives from other international missions/organisations providing or supporting basic secondary services in the national and referral hospitals (eg Cuban, Chinese) should be included in the PMC.

A separate **Technical Advisory Group (TAG)** will be engaged independently by AusAID each year to provide higher level strategic advice and guidance to the program and its development context, its progressive impact and effectiveness, the value-for-money that it represents, quality of implementation and management processes, and the performance of RACS as the contracted implementing organisation. It is proposed that the TAG undertake in-country visits during the weeks just prior to the PMC meeting.

It is planned that this TAG have three members:

- Health System and Development specialist
- Specialist in clinical training
- Specialist in clinical governance, audit and risk management

This would provide expertise over the full range of activities and would support the transition process from service delivery to capacity development and system implementation. Ideally one of the team members should have a background in maternal and child health. It will be important for the TAG to meet regularly (including by telephone and VOIP with the Team Leader) to ensure that the transition from service delivery to capacity building is on track.

Day-to-day and week-to-week guidance will be provided through regular consultation by the Team Leader with the MoH Director of Human Resources and Director of Hospital and Referral Services and, as necessary, the Planning and Budget Unit. This interaction will be strongly supported by AusAID's Dili-based Health Adviser.

A senior nominee (minimum Director level) from the MoH will be represented on the selection panel for LTA. LTA will report to RACS for employment matters, and the TAG will hold them accountable for clinical governance. The Program Management Committee, chaired by the MoH, will hold RACS to account for performance and this will include performance of individual LTA.

4.3 Inception period and development of annual work plans

The program team will be responsible for compiling draft annual work plans for review and approval through the PMC and subsequent submission to the JAR for endorsement. The first year's annual work plan, including terms of reference (TORs) for any proposed technical assistance or advisers (LTA, STA, and those supporting the development and delivery of Diplomas), should be developed within the first three months of the program. The program M&E Framework will be also be a milestone requirement during the inception phase.

4.4 Monitoring and Evaluation

Purpose

The purpose of ATLASS' monitoring and evaluation system will be to guide program improvement, meet reporting requirements and identify lessons learned for AusAID and the Ministry of Health around the provision of quality secondary services, to facilitate policy dialogue.

Standards

The M&E framework will be developed at inception in partnership with the MoH, the RACS program team, and an M&E adviser independently-contracted by AusAID to ensure ownership of the framework by all parties. It will meet the standards of the AusAID Indonesia and East Timor Branch, which are available on request.

More broadly, the M&E system developed will:

- Include a select group of indicators to monitor whether the agreed outputs are being delivered to time, quality and cost standards and outcomes expected by the program logic are occurring.
- Include key evaluation questions to guide the TAG, mid-term review, and any evaluative analysis conducted within the program eg: What are the factors accounting for adequate (or inadequate) progress against the end of program outcomes?
- Describe the methods that will be employed to collect information, and who will do this and at what frequency. Where possible information required should harmonise with routine information collected by GoTL.
- Consider conducting a baseline study against the expected outcomes of the program.
- Begin with an evaluability assessment that ensures all stakeholders have a shared understanding of the program logic, and ensures that the M&E system's plans for data collection, reporting, and use are feasible.
- Encourage mutual accountability and joint assessment with MoH and UNTL
- Include a full schedule of costed M&E activities

Mutual Accountability and Joint Assessment

There is currently no common GoTL monitoring and evaluation framework for the health sector and, although there is much data and various reporting systems, there is no systematised process which collects and transmits information between central and local levels although there are moves to provide integrated support from development partners to a national HMIS. Linking this information to decision-making is also a challenge. The AusAID-funded MDTF (NHSSP-SP) proposes to support the establishment and development of such systems but this will not be completed for some time.

The implications of this for ATLASS is that it may not yet be possible to use a national M&E framework to track outcomes and impacts except in maternal health (maternal mortality) and paediatrics (infant and under five mortality). While targets for increased rates of caesarean section and the provision of CEmONC are included in NHSSP, it is unclear whether they will be a part of the proposed overall M&E framework, nor whether they will be reported on in the MoH's Health Management Information System (HMIS).

Independent Evaluation

An **independent evaluation (mid term review)** is proposed for towards the end of Year 2, preferably around the time of the graduation of those completing the first Diploma course. This will be contracted independently by AusAID, but is included in the draft budget.

Conducting the evaluation early will enable the evolving policy context to be considered in detail, in addition to early achievements. The evaluation could also consider:

- The currency of the program logic and whether the program requires revision;
- Whether the program could or should offer a small number of targeted overseas specialist scholarships to outstanding graduates of the Diploma program, or limited, targeted English for academic purposes classes (possibility through an Australian Volunteer for International Development) if this is found to be a limiting factor in the delivery of the Diploma course (which is being delivered in English); and,
- The extent to which clinical guidelines have been developed, disseminated and are being implemented/adhered to; and,
- What a possible third phase of ATLASS might look like after June 2016 given progress to date.

M&E inputs, the TAG, and review costs represent approximately 5% of the ATLASS II operational budget. This is consistent with the AusAID Indonesia and East Timor Branch Monitoring and Evaluation Standards.

The M&E system's data collection methods will be designed at inception by the M&E specialist, but expectations to undertake rigorous clinical audit should be modified taking into account the difficulty of implementing standardised procedures, the problems establishing baseline data, difficulties associated with auditing individual episodes of care in the absence of a personalised medical records system, and the difficulty in agreeing realistic standards to audit against. Evaluation of adherence to protocol will primarily need to be based on 'spot checks' and periodic reviews rather than ongoing collection of comprehensive data. Whether this is a responsibility of the M&E component of the program or of the Quality Standards team at the MOH needs to be agreed during inception.

As per the AusAID Indonesia and East Timor Branch Monitoring and Evaluation Standards, during the inception phase of ATLASS II, the M&E framework should be developed and refined based on an evaluability assessment. It will draw on the goals and outcomes articulated in section 3.3. Indicative ToRs for the inception phase M&E specialist are at Annex 5. Further annual inputs by the M&E specialist are provided for in the budget. These inputs will be used to:

- Identify where the implementation team will require on-going M&E technical support, and where they will be expected to implement the M&E plan themselves.
- Provide regular support to the implementation of the M&E plan (according to the resourcing provided).
- Identify what capacity is required by the implementation team to implement the M&E plan and develop a simple capacity building plan to develop relevant skills, and to ensure that there is an enabling environment in place to implement the M&E plan.
- Supervise the compilation of progress reports that meet the requirements of AusAID and other primary users of the information such as national partners.
- Contribute to the intellectual development of the initiative during implementation.

As the MoH is moving towards an integrated implementation and monitoring approach for the sector ("one plan, one budget, one monitoring and evaluation framework"), the M&E specialist will also examine how well ATLASS inputs are harmonised and synchronised with other sectoral monitoring frameworks (e.g. for human resources and service delivery).

It is expected that progress reports on program implementation will be received six-monthly by AusAID.

4.5 Capacity building model

In a generally low capacity environment like Timor-Leste, it is important to ensure that all long- and short-term technical assistance contributes to sustainable capacity development of local individuals and institutions. To this end, the National Directorate of Aid Effectiveness at the Ministry of Finance²⁹ and the MoH Division of Global Fund³⁰ have both developed working papers and guidelines to inform the Ministry, development partners and technical advisers on more effective models of capacity development.

The Directorate of Aid Effectiveness paper identifies three types of technical assistance:

- i. strategic or policy advice;

²⁹ National Directorate of Aid Effectiveness, Ministry of Finance (2011). *Discussion Paper: A new approach to Technical Assistance in Timor-Leste*

³⁰ MOH, WHO (2011). *Guidance Note for Program Capacity Assessment and Capacity Development for Global Fund Funded Programs*

- ii. in-line functions;
- iii. capacity building of counterparts through the transfer of knowledge and skills

The approach of both LTAs and limited, targeted STAs under ATLASS II to capacity development will primarily follow a traditional medical skills and knowledge transfer model (type iii) to ensure that counterparts are equipped to work more effectively in clinical settings. However, the presence of program advisers in clinical settings will provide the opportunity to perform some in-line functions (type ii), and the support for national policies and clinical protocols reflects type i.

It is anticipated that in-service training courses developed under the new program will form an integral part of internship rotations for new medical graduates. Limited, targeted STA inputs may be necessary to assist the development of curricula and tools for assessing competency; provision for intermittent inputs of this nature during the first twelve to eighteen months of the new program is made available in the budget.

4.6 Budget and contractual arrangements

The overall maximum operational budget for the program is just under AUD 8 million, i.e. approximately AUD 2 million/year (equivalent in 2011-12 to approximately 4% of the current total MOH budget).

Over the life of the program, this represents an up-to 25% annual budget increase as compared with the last phase. This budget expansion is necessary to fund two additional LTA positions in-country with associated continuing professional development costs, and costs associated with accessing specialist short term advice, where required to support the development of the Diploma courses at UNTL. Annex 1 provides an indicative budget breakdown.

Subject to endorsement of the design, a contract will be negotiated with RACS that provides for a combination of baseline funding and some additional performance-linked or emerging needs-based budget allocations (e.g. to be linked to specific achievements, or to provide additional resources for areas that are assessed by the TAG as performing well but which are relatively under-funded).

Performance milestones will be based on deliverables including successful design of curricula modules, contribution to in-service training courses, and being able to demonstrate increased competency based on specific skills and knowledge transfer; and completion and accreditation of Diploma course curricula. These will need to be developed and confirmed during the inception phase in consultation with the MoH, the TAG team, and the M&E adviser.

RACS will also be allocated a management fee of approximately 11.5% which has been calculated to precisely off-set central administration costs supporting the project. RACS is a non-profit organisation and an Australian Council for International Development (ACFID) signatory.

4.7 Risk analysis and management

The principal risks associated with the proposed program reflect:

- a lack of clarity on MoH/GoTL plans for human resources for health development and workforce planning;
- the possible significant delay of establishing well-structured and well-supported Diploma courses;
- the possibility of delays in Diploma candidates attaining the required level of English language fluency prior to commencing the Diploma; and,
- possible risks around the recruitment and retention of suitable LTA with appropriate skills in both service delivery and teaching in a resource poor environment.

These and other risks are assessed in Annex 3. There are no risks that are assessed as having a “very high” ranking and most are able to be mitigated by close AusAID management, however the TAG and PMC are strongly encouraged to address identified and emerging risks regularly and

systematically – i.e. as a recurring agenda item on their respective TORs. A larger and stronger AusAID health team is now in place to monitor the program during implementation.

Annex 1: Indicative Budget

The financial limitation for the Program is AUD 8,700,000 plus GST if any, up to a maximum of AUD 870,000.

Component / Inputs (Indicative)	YEAR 1	YEAR 2	YEAR 3	YEAR 4	TOTAL
Personnel (Long Term and Short Term Advisers)	231,184	242,031	253,313	265,045	5,331,281
Visiting Specialists (Teams and/or Individuals)	175,500	87,750	-	-	263,250
Training, Supervisory and Mentoring support	138,750	136,240	151,424	101,238	527,652
In-country Program Management and M & E Personnel					976,550
Management Fee	223,237	206,204	194,961	195,834	792,291
Additional AusAID Design and Monitoring Costs (AUD)					808,976
TOTAL AUSAID COSTS (AUD)	768,671	672,225	599,698	562,117	8,700,000

Annex 2: Executive Summary of an Independent Review of AusAID support to surgical services in East Timor, March 2012

This summary is the output of a short independent review and is intended to inform future intent in supporting surgical capacity in Timor-Leste. The approach taken has been as follows:

- To identify demand for services (both the need for current service delivery and for capacity building) and the priorities of the government of Timor-Leste.
- To consider whether meeting the need for surgical capacity continues to be an appropriate role for Australian Agency for International Development (AusAID) and is in line with strategic intent.
- To identify the best way of meeting prioritised need both in the short and longer terms
- To examine whether any proposed support is complementary and does not overlap with other development partners.

- To identify how transition from dependence on external support to local capability can be achieved.
- To consider whether the Royal Australasian College of Surgeons (RACS) has a continuing role in meeting this demand (comparative advantage) and transitioning to new ways of working.

It is evident from the National Health Sector Strategic Plan (NHSSP) and discussions with the Ministry of Health (MoH) that capacity building, rather than service delivery, is their priority. There is an urgent need to provide further training and support to newly qualified doctors so that there is adequate capacity to meet the need for both primary care and basic secondary care. Maternal health is identified in the NHSSP as the highest priority given the poor maternal death rates and low percentage of caesarean sections and child health is also highlighted.

In the light of these priorities the following is proposed:

Program Goal

- To build capacity in basic secondary care services including obstetrics, paediatrics, anaesthetics, general surgery and orthopaedics (with an emphasis on trauma and mitigation of disability) recognising that these services, delivered in referral hospitals, will benefit poor women and children.

Program Deliverables

Short term

- Support to design and delivery of a Diploma course for recently qualified Timorese doctors in order to build their capacity in basic secondary care.
- Supervision and mentoring by both long and short term technical advisors to build competence and confidence in Timorese doctors.
- Some service delivery(combined with teaching) through Long-term Technical Assistance (LTTA), particularly in obstetrics and paediatrics, recognising the need to establish Comprehensive Emergency Obstetric Care (CEmOC) and the need for skilled care of neonates with a consequent impact on maternal and infant mortality.
- Support to development and implementation of standardised clinical guidelines and protocols harmonised with the curriculum for the Diploma.
- A transition from specialised surgical service delivery by Short Term Technical Assistance (STTA) to a focus on building capacity in those specialties which have the realistic prospect of long term local delivery. Where STTA continues to support local counterparts their input will be supplemented by e-supervision.

Long Term

- A cohort of competent and experienced Timorese doctors to meet the needs for basic secondary care in the national and referral hospitals and thus impact on the lives and health of poor women and children

The programme is designed to reflect the priorities identified by GoTL in the National Health Sector Strategic Plan 2011-30. In this document the first priority is maternal health, recognising the high maternal mortality figures (557 per 100,000) and the low caesarean section rate (less than 2%) The NHSSP also places a high emphasis on child health, primarily in primary care, but recognises the need for a secondary specialised paediatric service to address needs of newborns (50% of under-five deaths are in the first week of life) and the number of children hospitalised with communicable diseases (dengue, malaria), diarrhoea, acute respiratory infections and so on. Ensuring adequate competent doctors to deliver these services in the referral hospitals should impact on the indicators.

There is no information quantifying the need for general surgery or orthopaedics but the need to develop capacity in these areas has been acknowledged in the past, particularly in order to replace doctors from the Cuban Medical Brigade as they withdraw towards 2017. Certainly, the need to establish the ability to treat trauma (which is a major cause of death and injury), to undertake defined orthopaedic procedures to reduce long term disability and to provide urgent general surgery (particularly for acute abdominal problems) is in line with basic secondary care services provided in many similar resource poor settings internationally and will impact on mortality, morbidity and long term disability. It will also make these services more accessible in decentralised locations which will advantage the poor, women and children.

The proposed program which transitions to a focus on long term technical advisors providing some service (but primarily undertaking training and supervision) together with developing and implementing standard guidelines and protocols, appears to be in line with AusAID's strategic intent. This is particularly the case with an emphasis on building capacity in obstetrics (including CEMOC) and paediatrics and institutionalising systems which are known to improve outcome such as Maternal Mortality Reviews. The proposal complements other AusAID programs and the work of other development partners.

Through designing and supporting the delivery of a Diploma course at National University of Timor-Leste (UNTL), it will be possible to ensure that there are adequate numbers of local doctors with basic competence in obstetrics, paediatrics, general surgery, orthopaedics and anaesthetics. In the short term, additional service delivery (combined with training and supervision) from an obstetrician and a paediatrician should impact on maternal, infant and under 5 mortality.

RACS has a successful track record in providing short and long term input in Timor-Leste. Whilst the proposed program would shift from a high service delivery content, much delivered by STTA, to a new modality with an increase in capacity building and clinical policy development, mainly using LTTA, this does not seem beyond RACS corporate competence. They have systems in place to ensure quality of input. Whilst focussing on the provision of LTTA will be a change of focus, RACS are confident that they will be able to source specialists with competence in both delivery of a service and also curriculum development, course delivery, supervision and mentoring. Some short term inputs will continue for a transition period, particularly where it is supporting counterparts to deliver services which are sustainable in the long term. An increasing use of communication technology is envisaged including e-supervision using phone, Voice over Internet Protocol (VOIP) and video conferencing.

Annex 3: Risk Analysis and Risk Management Plan

Source of Risk	Likelihood	Consequences (Impact on Program)	Risk Impact	Risk Mitigation Strategy	Responsibility	Timing
Risks related to Program Design and HRH Policy and Planning						
Distortionary effect of having additional resources available for secondary and tertiary care, resulting in under-emphasis of PHC within overall health expenditure	Possible	No impact on the program. However, the consequences for balance in overall health expenditure may be significant unless well managed).	Low	The program will use its NHSSP-linked governance processes to monitor balance of expenditure on specialised services relative to overall health expenditure, including through the JAR at the higher analytic level. Participation of the Planning and Budget Unit in the proposed quarterly sector coordination meetings will provide an opportunity for closer scrutiny of planned expenditure.	MOH, AusAID	Continuous (but especially during JAR and quarterly health sector coordination meetings)
MOH does not endorse UNTL proposal for Diplomas and or its enabling systems are inadequate	Possible	Should the post-graduate Diploma not be endorsed as MOH policy or UNTL systems be inadequate to deliver it, this key feature of the program will be unable to progress.	High	LTA has the potential to undertake capacity building of individuals with potential outside a formal Diploma process but this would not provide doctors with formally accredited competence	RACS, MOH, UNTL	During Years 1 and 2 of the program, when career structures and training accreditation are likely to be determined formally
Financing and Financial Risks						
Program budget diverted from	Possible	Severe – Diversion of funds away from	High	Policy dialogue with MOH and partners at JAR; structure of	AusAID, MOH	Prior to signing of

Source of Risk	Likelihood	Consequences (Impact on Program)	Risk Impact	Risk Mitigation Strategy	Responsibility	Timing
capacity development to service delivery as a result of pre-conditions for training inputs not being met		capacity development activities and towards service delivery (e.g. through additional in-country LTAs or an increased frequency or duration of visiting teams) would significantly compromise progress towards NHSSP HRH objectives and development of work force, with loss of benefits of in-country training		budget, which will provide for a baseline level of funding for the program but release of full budget only in support of selected performance requirements (e.g. successful implementation of training and capacity development activities, successful movement of program-supported activities towards districts, etc – <i>to be confirmed in final contract</i>).		agreement between Governments of Australia and Timor-Leste; at signing of contract between AusAID and RACS
Risks related to Program Implementation						
Program unable to identify appropriately qualified and experienced LTAs who are able to relocate to Timor-Leste for at least 2 years	Possible	Moderate – Potential disruption of mentoring and supervision relationships with trainees and staff, and in relationship with MOH.	High	If RACs are unable to recruit and retain suitable LTA terms and conditions may need to be reviewed or other suppliers considered on a sub contract.	RACS	Continuous (but especially leading during inception period, and for review at JAR and quarterly sector coordination meetings)
MoH's Quality Control Unit fails to	Possible	Moderate – Possible impacts on the quality	Medium	Policy dialogue between AusAID, RACS and MoH.	RACS, MOH, AusAID	Continuous

Source of Risk	Likelihood	Consequences (Impact on Program)	Risk Impact	Risk Mitigation Strategy	Responsibility	Timing
support and oversee development and implementation of standard treatment guidelines, protocols, maternal mortality reviews, etc.		of the program outputs.				
Program inputs and activities overwhelm MOH and UNTL capacity to absorb assistance	Unlikely	Moderate – Potential slowing of rate of progress in developing post-graduate Diploma training according to proposed UNTL model.	Medium	Careful dialogue with UNTL and MOH during and between quarterly sector coordination meetings; adjustment of pace of LTA and curriculum development inputs according to UNTL capacity	UNTL, MOH, ATLASS	Continuous
Poor communication due to language and cultural differences (both LTA and Diploma students)	Possible	Moderate inadequate comprehension for knowledge transfer or supervision, mentoring	High	Language assessment for Diploma candidates. Cultural and language preparation for LTAs, and for East Timorese candidates travelling overseas for training; availability of in-country translator on program management team, and availability of English language training in-country through program budget	UNTLRACS, MOH. clinical supervisors responsible for endorsing candidates	Continuous (but especially leading up to change of staff and prior to commencement of training activities or placements)
Lack of demand for and utilisation of basic secondary services (especially for obstetric services)	Possible	Moderate – if individuals are not seeking secondary services as required there is a risk that	Medium	Close engagement with RACS, MOH and NGOs to stimulate the demand side and health-seeking behaviour/referrals is required. Promotion strategies	RACS, MOH, NGOs	Continuous

Source of Risk	Likelihood	Consequences (Impact on Program)	Risk Impact	Risk Mitigation Strategy	Responsibility	Timing
		mortality ratios will not decrease and ATLASS II efforts undermined		should be explored. Linkages with NGOs working at the community level, especially in providing antenatal care, should be developed.		
Lack of adequate post-operative care (especially equipment and nursing) compromises impact of increased availability of basic surgical services	Likely	Major – Patients face increased risk of post-operative complications and poor outcomes	High	Careful collaboration with St John of God nursing team in HNGV to ensure appropriate briefing and preparation of ward and operating theatre staff; policy dialogue between AusAID and MoH on provision of requisite support services.	RACS, IHS, HNGV management	During briefing of specialist team STAs in advance of visits, and during preparation of ward and operating theatre staff in advance of visits

Source of Risk	Likelihood	Consequences (Impact on Program)	Risk Impact	Risk Mitigation Strategy	Responsibility	Timing
External Risks						
Unanticipated withdrawal at short notice of other international programs of assistance for clinical services	Unlikely	Major – Would result in collapse or near-collapse of existing clinical services at specialist level, requiring diversion of program resources away from capacity development and specialist team and STA visits towards service delivery through larger LTA team	Medium	Inclusion of clinical service delivery in agenda for health sector JAR; regular formal and informal dialogue with members of other international medical assistance missions; flexibility inherent in Program design (e.g. where resources can be transferred between STA and LTA line items to meet unexpected short-falls).	MOH Director-General and Directors; AusAID	Continuous, but with annual review during JAR
Emergence or re-emergence of epidemic or pandemic threat	Possible	Moderate – Could overwhelm health services, result in social and civil disorder, potentially resulting in diversion of significant program resources or suspension (or even cancellation) of program	High	National pandemics and emerging infectious diseases preparedness plan in place, updated in response to 2009 H1N1 influenza pandemic. Program and MOH to work pro-actively with WHO to maintain service provision as much as possible while addressing direct consequences of pandemic.	MOH and WHO; AusAID (via emergency mobilisation of TAG)	Continuous
Political and/or civil and /or military instability	Unlikely	Moderate – Could disrupt health services, and potentially result in suspension (or even cancellation) of some aspects of Program.	Medium	Beyond control of program management; staff security plan and contingency plan developed under ATLASS (and still relevant), and security risks reviewed regularly. TAG and	RACS (via PMC), AusAID (via TAG and Department of Foreign	Continuous, but especially in lead-up to forthcoming Presidential and

Source of Risk	Likelihood	Consequences (Impact on Program)	Risk Impact	Risk Mitigation Strategy	Responsibility	Timing
		When faced with similar challenges in 2006-07, ATLASS was able to maintain both capacity development and service delivery with little impact on program model (even though HNGV disrupted by large displaced persons camp on-site until 2009).		PMC to analyse contextual issues that could affect Program performance annually, and advise any necessary modification of design or implementation methods (including feasibility of travel to or periods of residence in districts).	Affairs and Trade)	Parliamentary elections (likely April and June 2012)

Annex 4: ATLASS Ratings against key development criteria from the 2010 Independent Progress Review

Evaluation Criteria	Rating (1-6)	Explanation
Relevance	4	The provision of specialist services and the development of specialists remain highly relevant to the context of Timor-Leste. However, shifting Timor-Leste and Australian government priorities suggest the current approach is less relevant in terms of contributing to improved MNCH outcomes at the district-level.
Effectiveness	5	ATLASS has been highly effective in providing high quality specialist services at the National hospital and in district hospitals through short-term visits and training of nurse anaesthetists. While it has contributed to capacity development of trainees, this approach has been affected by inconsistency in mentoring by LTA surgical staff. It has also been less effective in producing a full cohort of formally accredited specialists as per the design expectations.
Efficiency	4	The sustained presence of the LTA in anaesthesia and the efficient mobilisation and contribution of short-term sub-specialty visits demonstrate efficient areas of ATLASS. However, the failure to adequately recruit to the LTA surgical positions and the absence of an alternate strategy, and a fragmented institutional linkages component, has reduced the efficiency of ATLASS.
Sustainability	3	The training of a cohort of nurse anaesthetists, and imminent return of a Timorese surgeon and the first anaesthetist, will contribute to sustained specialised services beyond ATLASS. However, remaining surgical trainees will require continued professional and financial support, and MoH capacity (and funding) to manage short-term visits and institutional linkage activities is unsustainable.
Gender Equality	4	The equal benefit to men and women from the services provided through ATLASS is commendable but the lack of adequate representation and participation of women in the ATLASS training activities reduces the overall gender equality ranking.
Monitoring & Evaluation	3	Despite improvements in the monitoring and evaluation framework, it remains unnecessarily complex, collating an excess of information, without attention to that which is most important, namely measures of capacity development outcomes.

Evaluation Criteria	Rating (1-6)	Explanation
Analysis & Learning	4	ATLASS has performed well in terms of real-time analysis and learning, and being responsive to new priorities. But long-term difficulties in recruitment affecting both AETSSP and ATLASS suggest the need to explore new strategies.

Rating scale:

Satisfactory		Less than satisfactory	
6	Very high quality	3	Less than adequate quality
5	Good quality	2	Poor quality
4	Adequate quality	1	Very poor quality

Annex 5: Indicative ToRs for inception phase M&E specialist

1. Qualifications

The consultant should hold a post graduate degree that has included a research dissertation component. Alternatively, evidence of training in research or evaluation design, conduct and management. This should include more than short professional development courses in M&E.

2. Experience

Essential

- 2.1 Experience developing M&E systems for projects in resource constrained settings.
- 2.2 Demonstrated practical experience in research or evaluation design, conduct, and management. This experience should reflect expertise in developing a fully elaborated design of an M&E system which includes the design approach, articulation of M&E questions, development of sound methods and tools, conduct of data collection activities, analysis of data (or supervision of such), interpretation and dissemination of results and report preparation. Development of an M&E plan only that has not been implemented by the candidate is not adequate experience.
- 2.3 Demonstrated ability to break-down and communicate complex concepts simply with a range of stakeholders in multi-cultural settings.
- 2.4 Demonstrated ability to support program teams to improve M&E. This may also include partners within Ministry of Health and the National University of Timor-Leste, as well as AusAID.
- 2.5 Demonstrated ability to facilitate learning from, and response to, M&E findings with implementation teams and other relevant stakeholders.

Desirable

- 2.6 Demonstrated experience in the delivery of development projects.
- 2.7 Demonstrated on-going membership of a domestic or international evaluation society (such as the Australasian Evaluation Society), or other demonstrated commitment to keeping up to date with the theoretical and practice developments in the field of evaluation.

3. Terms of Reference

- 3.1 Conduct an Evaluability Assessment at inception. The M&E Specialist is expected to be familiar with this form of assessment. At a minimum this would include:
 - a review of the expected end-of-program outcomes and robustness of the program logic;
 - articulation of the decisions and information needs of AusAID, MoH, UNTL and RACS that determine the purpose and scope of the M&E system. This should include a set of key evaluation questions that will guide information collection, analysis, and reporting.

- review of the availability and quality of existing data sources;
 - review of the capacity of the implementation team or other relevant stakeholders to collect, analyse and report on data;
 - articulation of the resources and budget available to conduct M&E for the program.
- 3.2 Using a participatory approach, design a monitoring and evaluation framework (plan) that meets the expectation of AusAID and international standards of practice in M&E. AusAID M&E Standards are available from Program Managers on request. These are based on standards such as the DAC Evaluation Quality Standards and the Joint Committee Standards (available at <http://www.jcsee.org/program-evaluation-standards/program-evaluation-standards-statements>).
- 3.3 Identify where RACS will require on-going technical support from the M&E Specialist (e.g. linking M&E to annual planning), and where they will be expected to contribute through reporting to specific M&E plan activities (e.g. compiling existing data, ensuring logbooks are completed). This should be closely coordinated with the terms of reference for the Technical Assessment Group (TAG), developed by AusAID.
- 3.4 Provide regular support to the implementation of the M&E Plan (according to the resourcing provided). The focus ought to be on the on-going design of M&E activities (e.g. surveys, case studies); assuring the quality of the M&E Plan's implementation (e.g. quality of data collection processes); and providing technical support for the collection, analysis and interpretation of data where more advanced skills are required (e.g. interpreting more complex data).
- 3.5 Identify what capacity is required by the implementation team to implement the M&E Plan and develop a simple capacity building plan to develop relevant skills, and to ensure that there is an enabling environment in place to contribute through reporting to specific M&E plan activities
- 3.6 Supervise the compilation of initiative progress reports that meet the requirements of AusAID and other primary users of the information such as national partners. An evidence-based, timely contribution to the Quality at Implementation Reports, Independent Progress Reports and Activity Completion Reports should be prepared where requested. Reports must be analytical, not just descriptive. The following types of questions ought to be answered in progress reports: What is the current situation? What are the inhibiting or facilitating factors that have led to this situation? What are the implications for the program? What have been, or are planned management responses to this situation?
- 3.7 Working as a facilitator, and in close coordination with the TAG, support the implementation team and other relevant stakeholders to interpret and respond to M&E findings over the life of the program.