Background Information and Context

In 2012 the Australian Government committed to construct a Tuberculosis (TB) and isolation ward for the Daru General Hospital (DGH) in Western Province, Papua New Guinea (PNG). Opened in August 2013, the Tuberculosis (TB) and isolation ward (hereafter ‘the Facility’) became the first purpose built ward of its kind in PNG. At present, DGH remains the only hospital in PNG to have an international standard isolation facility for patients with infectious diseases. The ward has 22 beds, including six isolation beds for patients with infectious TB. Additionally, accommodation and ablutions facilities for the carers of TB patients are provided on site. Demand for the new facility appears high. All beds in the TB and isolation ward are presently being used, with a flow over of patients to the old TB ward within the hospital.

Timeline of design, construction and completion

Charles Kendall and Partners were contracted to manage the design and construction of the TB and isolation ward. Prior to completion of the design, SMEC PNG was contracted to review and amend the drawings after a trained infection control engineer found that the original Government of PNG drawings were not compliant with international standards or Australian Building Codes. Finalisation of the design did include additional changes requested by the PNG National Department of Health (NDoH).

Construction commenced in October 2012 with Alexander and Lloyd providing construction management services and Avenell Engineering Systems providing construction services. A number of design modifications and variations were required during the construction period including, for example, the use of fire retardant sheets and motorised Hurricane air extractors. Practical completion occurred in June 2013. The 12 month defects liability period will finish in September 2014.

The official opening of the TB and isolation ward was conducted in July 2013 by Australia’s previous Parliamentary Secretary for Pacific Island Affairs (Hon Matt Thistlethwaite) and the PNG Minister for Health (Hon Michael Malabag). A number of minor contract variations were added following the opening, including the purchase and installation of wall-mounted television[s], landscaping and improved access ramps. The TB and isolation ward became fully functional in August 2013.

About the Role

The Infection Control and Clinical Standards Specialist is mobilised as part of an Evaluation Team tasked to conduct a post-occupancy evaluation (PoE) and operational audit (‘the evaluation’) of the TB and isolation ward at DGH. The evaluation has three interlinked objectives:

1. to assess whether PNG standards were complied with in the design and construction of the facility;
2. to assess whether the facility is ‘fit-for-purpose’, and;
3. to recommend how lessons learned during the establishment and operation of the Facility can best inform future efforts to build similar infrastructure.

The Scope of Services for the evaluation is detailed within the Project Workplan (see attachment) and should be read in conjunction with this Terms of Reference. The Infection Control and Clinical Standards Specialist is expected to work closely with the Health Service Planning Specialist and the Infrastructure Specialist, and as such these Terms of Reference should be understood to comprise a component of a team output. However, the Infection Control and Clinical Standards Specialist is expected to provide specific knowledge and experience and is required to make specific contributions to the Team as outlined below.
Detailed Terms of Reference

The Infection Control and Clinical Standards Specialist will support the Infrastructure Specialist to assess whether the design and construction of the Facility, and associated contractual and financial procedures, was undertaken in compliance with PNG standards (i.e. objective 1). The Infrastructure Specialist will design and lead an audit of each phase of the design and building process. The Infection Control and Clinical Standards Specialist will ensure that this audit includes:

- an assessment of the extent to which the Facility adheres to the PNG National Health Service Standards with respect to infection control and clinical standards
- the extent to which the design supports the requirements for sustaining the type of infection control practices required for an isolation ward, particularly with respect to the ventilation systems, wall and floor fabrics, and fittings chosen
- the extent to which the design supports effective waste management
- the extent to which the design supports adequate spatial flow with respect to both visitor flow and application of infection control practices

The Infection Control and Clinical Standards Specialist will support the Health Service Planning Specialist to assess whether the Facility is fit-for-purpose (i.e. objective 2). The Health Service Planning Specialist will lead an operational audit which will make use of feedback obtained from Facility staff and patients as well as stakeholders involved in the original design and planning for this Facility. The Infection Control and Clinical Standards will ensure that this audit considers:

- the functionality of the physical components of the building and equipment to support the maintenance of the required levels of infection control practice in an isolation ward
- the adequacy of the mix of natural and electric lighting
- the functionality of the ventilation system/s within the facility including testing for pockets of stagnant air
- the effectiveness of the design in supporting staff to deliver the desired improvements in the quality of patient care, particularly for multi-drug resistant TB, including identification of examples of practice changes
- the effectiveness of the design in ensuring (transmission) safety and (physical) security for staff, patients and visitors
- adequacy and functionality of the waste management facilities in use
- the utilisation of the facility, in accordance with the National Health Service Standards, the PNG treatment protocols and international treatment guidelines for TB and infection control, with respect to:
  - current occupancy levels
  - predicted and current TB service demand within Western Province, the South Fly District and the immediate catchment area of the facility
  - complexity of the patients being treated within the facility (i.e. presence of multi-drug resistant TB, extensively drug-resistant TB, comorbidities)
  - the capacity for growth, modification and change

The Infection Control and Clinical Standards Specialist will support the Health Service Planning Specialist to recommend how this project can serve as a blueprint for undertaking similar initiatives in PNG in the future (i.e. objective 3). The Infection Control and Clinical Standards Specialist will make recommendations with respect to:

- refinements required to the current design to ensure the final product will be as close to fit-for-purpose as possible given the findings identified under objective 2
Health & Education Procurement Facility (Papua New Guinea)

INFECTION CONTROL & CLINICAL STANDARDS SPECIALIST
Terms of Reference / Job Description

Detailed Terms of Reference (cont.)
- refinements required to the current design to ensure compliance with the National Health Service Standards and international best practice guidelines for infection control in health facilities (e.g. the WHO Policy on TB Infection Control in Health Care Facilities, Congregate Settings and Households, and the CDC Guidelines for Environmental Infection Control in Health-care Facilities). Given that these recommendations will inform the development of a standardised design for PNG, consideration should be given to the often significant limitations of human and financial resource availability and of the operating environment.
- standardised procurement lists for wards of this kind including a detailed furniture, medical and non-medical equipment list
- refinements to the existing PNG treatment protocols and guidelines and to the National Health Service Standards, if necessary, following review of the functionality and operations (both administrative and clinical) of the TB and isolation ward.

Reporting Relationships
- Evaluation Team Leader and Infrastructure Project Manager - Health Minor Works (HEPF)

Outputs and Reporting Requirements
The Adviser will contribute to the completion of the final Post-occupancy Evaluation Report as described within the Project Workplan.

The report shall be:
- of the highest standard of quality including content, formatting, spelling and grammar
- prepared in accordance with DFAT guidelines and HEPF reporting guidelines
- provided as an electronic MS Word file, and delivered by the required date

Reference Material
A set of recommended reference materials is included within the Project Workplan. Commentary is included at each item to identify whether the material is currently available or unable to be sourced at the time of preparing this Terms of Reference.
Experience and Qualifications

- Ten (10) or more years professional experience in health service planning. This should include demonstrated experience in the Pacific and preferably within PNG.
- A demonstrated knowledge and experience in conducting Post-occupancy Evaluations for health facilities is desirable.
- An understanding of and/or willingness to learn about the PNG National Health Service Standards as they apply to the design, construction and maintenance of health infrastructure.
- Good analytical/problem solving skills.
- Five (5) or more years operational experience in international development.
- Computer competencies including word processing, presentations, spreadsheets, and information management.

Key Competencies

- Demonstrated ability to work collaboratively and effectively at a range of strategic and administrative levels in a cross-cultural setting.
- Commitment to participatory ways of working.
- Strong oral and written communication skills.
- Highly developed interpersonal skills.
- An understanding of and/or willingness to learn about gender issues, social inclusion, HIV/AIDS, child protection and human development frameworks such as the MDGs.
- Excellent written and verbal communication skills in the English language.

Apply for this role

To apply for the above position, please submit a cover letter with your Curriculum Vitae (CV) in the DFAT approved format to hepfsta@hepf.net by 5pm AEST on Monday 22nd September 2014.

Note the approved DFAT CV template is available on the HEPF website Work Opportunities page, www.hepf.net/work-opportunities/

Only short listed applicants will be contacted.