

# **TB PREVENTION AND CONTROL IN PNG**

## **REPORT OF THE REVIEW OF CONTRIBUTION OF DFAT INVESTMENTS 2011-2018**

### **Management Response**

The Government of PNG, primarily through the PNG National Department of Health (NDoH) in particular the National TB Program (NTP), and Provincial Health Authorities (PHAs), leads the response to TB in PNG. A range of partners contribute to the response, including DFAT, the Global Fund to fight AIDS, TB and Malaria, the World Health Organization (WHO), the World Bank, DFAT-funded implementing partners including HHISP, Burnet Institute, World Vision, FHI 360, ChildFund, and other key partners including Medicins Sans Frontieres (MSF) and Oilsearch Foundation. In 2014 the Government of PNG declared a TB emergency, with Daru in Western Province, the National Capital District (NCD) and Gulf Province designated as TB hotspots.

Since independence, Australia has provided significant support to PNG's health system in general, and to TB in particular. Australia primarily focuses its investments in TB in Western Province and NCD. We also support a range of investments at the national level, including: building laboratory capacity to diagnose TB; support for WHO's TB control activities in PNG; investments in rural primary health care infrastructure and information systems (including roll out of a TB module in the electronic National Health Information System); funding for the Global Fund's nationwide TB treatment program; and support for the PNG Global Fund Country Coordinating Mechanism.

DFAT commissioned the review to assess the contribution that Australian support has made to achievements in TB prevention and control since 2011, and to inform the next phase of Australia's support for TB. DFAT's review also helped inform the NDOH-led comprehensive review of the National TB Strategy 2016-2020, which took place in 2019 and has provided the basis for the NTP's current work in developing a new National TB Strategy 2020-2025. The design of DFAT's next phase of support will begin in 2020 following the conclusion of the national planning exercise. This recognises the role of NDoH as policy lead in responding to the TB emergency.

The recommendations provide practical and useful suggestions. Many recommendations, however, are outside DFAT's mandate, and will require agreement and action from a range of actors in the TB response and most importantly the Government of PNG. The Management Response therefore focuses on DFAT's role in supporting the PNG Government to consider and implement those recommendations (as they determine to be appropriate). While DFAT has prepared the management response in consultation with a range of stakeholders including PNG Government, the views expressed in the response remain those of DFAT.

DFAT recognises the leading role of the Government of PNG (through NDOH and PHAs) in TB policy development, financing and implementation in PNG. This is consistent with DFAT's engagement in the PNG health sector, which recognises the sovereign responsibilities of PNG to prioritise, plan, and deliver health services to its population, with external support where needed.

As this review demonstrates, Australia has played an important and significant role in helping the Government of PNG to contain a serious outbreak of multi-drug resistant TB in Western Province and NCD. TB, however, is a disease of poverty. Inadequate access to high quality health services, poor nutrition, and overcrowded living conditions with inadequate sanitation all contribute to the transmission of TB and development of active TB. For these reasons, a successful, long-term solution to TB in PNG will be driven by economic development and improvements in a range of social determinants.

On its own, Australian investment in health systems will not be sufficient. A comprehensive, sustained, multi-sectoral approach led and primarily financed by the Government of PNG will be required. Efforts to strengthen economic development are underway, led by the Government of PNG and supported by a range of development partners including DFAT. No one donor can adequately address underlying social determinants given limited budgetary capacity.

DFAT thanks the independent review team for their comprehensive assessment of the TB program in Western Province and NCD and Australia's contributions to it, and their suggestions for strengthening the TB program.

### **Next steps**

DFAT will support the implementation of these recommendations in close partnership with the Government of PNG. We will coordinate this effort through a number of mechanisms including the high-level TB Emergency Response Steering Committee, the TB Technical Working Group, the Western Province TB Core Group, the development of the National TB Strategy 2020-2025, and the design of our next phase of TB support.

Recommendations	Response	Explanation	Action Plan	Timeframe
<p><b>TB and Health System Strengthening</b></p> <p><b>1. Maintain the focus, intensity and financial support of the TB emergency response and do so in a way that increasingly invests in strengthening the underlying health system for sustainability in containing and reversing TB:</b></p> <ul style="list-style-type: none"> <li>i. Develop Daru and NCD as centres of excellence including training sites for clinical management of MDR-TB and operational research.</li> <li>ii. Build in early adoption of changing evidence-based practice across PNG (such as all-oral short MDR-TB treatment regimens and treating latent TB) in the new National TB plan from 2020.</li> <li>iii. Fast-track TB elimination in feasible locations (such as Daru Island) in the new National TB plan from 2020.</li> <li>iv. Consider opportunities for using the excellent TB outreach platform to strengthen integrated primary health care including immunisation as the TB response matures, starting in Daru from 2019.</li> <li>v. Develop a national policy and guidelines on TB infection control based on the patient journey in community care and in hospitals including the training of multidisciplinary</li> </ul>	<p>Agree</p>	<p>DFAT agrees with the recommendation that we maintain our commitment to the TB emergency response within budget parameters identified by the Australian Government. We recognise that although important progress has been made, gains need to be maintained and strengthened. From 2020, we will explore ways our program can strengthen the underlying health system and promote sustainability. This will be an increasing focus for DFAT's next phase of TB support.</p> <p>DFAT agrees with the sub-recommendations; however, we note that many of these are programmatic decisions</p>	<ul style="list-style-type: none"> <li>i. Work to develop Daru and NCD as centres of excellence is already underway, and will be expanded through the next phase of DFAT bilateral and regional support. Daru provides opportunities for training on best-practice management of MDR-TB and operational research, which can be built upon. Burnet Institute is working with NDoH to increase the capacity of Port Moresby General Hospital to function as a training site for MDR-TB management; this work will continue in 2019 and beyond.</li> <li>ii. The development of a new National TB Plan from 2020 is being led by NDoH. DFAT will continue to invest in new and improved practices, and support their early adoption. We note that recommendation on all-oral shorter MDR-TB treatment regimen should be considered under operational research, as per WHO consolidated guidelines on drug-resistant tuberculosis treatment (2019). An all-oral regimen is recommended and possible in most patients on longer MDR-TB treatment.</li> <li>iii. NDoH is leading on the development of the new National TB Strategy. DFAT will maintain support to TB control and elimination in Daru under NDOH's leadership.</li> <li>iv. DFAT agrees with the recommendation to strengthen integrated primary health care</li> </ul>	<p>2019/2020</p>

<p>health care workers, community and patients in 2019.</p> <p>vi. Link TB initiatives with the DFAT co-funded (with ADB) Health Services Sector Development Program (HSSDP) where appropriate, such as data management and leadership and management development of national and local PNG TB leaders from 2019.</p>		<p>to be led by the National TB Program, NDoH, with support from key partners including WHO and DFAT.</p>	<p>using the platform that has been developed through TB activities in Daru. We will look for opportunities to progress this through a new phase of support from 2020.</p> <p>v. DFAT agrees that TB infection control and training of staff is a critical issue. Strengthening infection control was a key recommendation from the recent National TB Program review. Development of national guidance should be led by NDoH.</p> <p>vi. Linkages with HSSDP is occurring (for example through the development of Mabaduan Health Centre in Western Province - WP), and DFAT will continue to maximise opportunities for TB development through HSSDP.</p>	
<p><b><u>Effectiveness and Efficiency</u></b></p> <p><b>2. Implement a set of actions and adjustments that will increase the effectiveness and efficiency of current national, provincial and DFAT funding for TB in WP and NCD to maximise outcomes.</b></p> <p>i. Develop a targeted strategy to support implementation of the new 2019 WHO TB guidelines including capacity building and strengthened compliance monitoring.</p> <p>ii. Establish a standard of same-day return of GeneXpert tests results beginning in WP (Daru General Hospital-DGH) and NCD (Port Moresby General Hospital - PMGH and NCD community centres) in Q2 2019 (informed by root cause analyses of current delays, provide additional GeneXpert machines</p>	<p>Agree</p>	<p>DFAT agrees with the overarching recommendation, but we note that NDOH and PHAs control national and provincial funding and have decision-making powers in this respect. DFAT's next phase of support will focus on improving efficiency and effectiveness of our funding to maximise outcomes.</p> <p>DFAT agrees with the sub-recommendations</p>	<p>i. DFAT agrees that ensuring adherence with WHO TB Guidelines is a critical component of building capacity. This recommendation will be progressed nationally through the recent national TB program review and new strategy development. DFAT will support implementation in WP and NCD through our current and future programming.</p> <p>ii. Barriers to timely diagnostic test results are being reviewed as part of the NTP-led review. DFAT supports efforts to improve timeliness of return of results in Western Province and NCD, including efficient use of GeneXpert machines, through our support for Central Public Health Laboratory (CPHL) TB services. For example we fund a TB Laboratory Advisor at CPHL. DFAT will continue to strengthen TB laboratory services in 2020 and beyond.</p>	<p>2019/2020</p>

<p>where required or their redistribution and training) from Q2 2019.</p> <ul style="list-style-type: none"> <li>iii. Strengthen continuous professional development in TB including for all senior health people – managers, medical, nursing - soon after their appointment.</li> <li>iv. Establish and strengthen referral and patient tracing mechanisms from PMGH TB outpatients (adult and paediatric) to community-based care and outreach and between the three community-based NCD services drawing on lessons learned in Daru, commencing in Q2 2019.</li> <li>v. Review the effectiveness and impact of mobile TB screening in Daru in Q2 2019 to guide future systematic TB screening in WP and NCD (and elsewhere in PNG as appropriate), with a view to a strong systematic approach in both WP and NCD purposefully targeting high-risk groups with speedy rollout to all the population including GeneXpert Ultra for more sensitive testing and offer TB preventative therapy to those infected.</li> <li>vi. Implement first and second line Line Probe Assay testing at CPHL to move away from using Queensland testing facilities and initiate patients on appropriate treatment regimen based on sensitivity patterns in Q1 2019.</li> <li>vii. Review efficiency opportunities for TB home visits in Daru and NCD, including the treatment supporter system, in Q2 2019.</li> </ul>		<p>however notes that many of these are programmatic decisions for the National TB Program under the leadership of NDoH, in collaboration with key partners including WHO.</p>	<ul style="list-style-type: none"> <li>iii. Professional development is and will continue to be an important component of DFAT’s support. We will strengthen this through our next phase of support, which will have a particular focus on local staff capacity building for long-term sustainability.</li> <li>iv. DFAT agrees with this recommendation and notes that implementation is underway, led by NTP/NCD and NGOs. The DFAT-funded Child TB project supports referral processes for paediatric patients.</li> <li>v. WHO undertook a review of TB screening in Daru in 2019, and recommendations are being progressed and are informing next steps including in NCD.</li> <li>vi. LPA capacity has been established at CPHL with DFAT support. DFAT continues to support a laboratory advisor at CPHL who is building capacity and training on LPA. However, we also note that CPHL will continue to depend on Queensland testing facilities (QMRL) as a reference laboratory for external quality assessment, capacity building, and monitoring support.</li> <li>vii. DFAT will examine opportunities for increasing efficiency in TB home visits through the design of the next phase of our support in 2020.</li> <li>viii. DFAT will examine the effectiveness of patient enablers as part of the design of the next phase of TB support.</li> <li>ix. DFAT agrees but notes that drug supply is the responsibility of NDOH. DFAT is providing</li> </ul>	
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<ul style="list-style-type: none"> <li>viii. Review the effectiveness of patient enablers (meals, food vouchers and bus fares) in improving patient adherence.</li> <li>ix. Update drug ordering to reflect new WHO guidelines and support and monitor to decrease risk of over or under supply from Q2 2019.</li> <li>x. Analyse TB bed utilisation needs at DGH given the WP TB response roll-out, in 2019</li> <li>xi. Conduct a root cause analysis of the high Loss To Follow Up (LTFU) in NCD to support both strengthening and accelerating the TB response, in Q2 2019.</li> </ul>			<p>support, for example through the roll out of medical supply logistics software (mSupply) to lower-level health facilities, including 50 TB BMUs nationwide.</p> <ul style="list-style-type: none"> <li>x. DFAT will discuss and progress this recommendation through the Core Group (including DGH and the PHO) in Daru.</li> <li>xi. DFAT support in NCD is working to address LTFU rates, with good progress so far. We will work with NDOH and partners to strengthen this work in 2020.</li> </ul>	
<p><b><u>Leadership and Governance</u></b></p> <p><b>3. Strengthen the leadership and management of the TB response in WP and NCD to ensure that all partners are working well together towards agreed high level targets and indicators and common objectives.</b></p> <ul style="list-style-type: none"> <li>i. Strengthen the strategic focus of the WP Core Group and its use of data for monitoring from Q2 2019.</li> <li>ii. Fill the WP provincial TB leadership position.</li> <li>iii. Analyse and augment where needed implementing partner coordination mechanisms for NCD and WP in Q2 2019 including (i) ensuring clear lines of local management accountability, and (ii) developing processes for joint annual planning of implementing partners with an integrated results framework and strong M&amp;E and (iii) consider an annual TB</li> </ul>	Agree	DFAT agrees with the recommendation that we strengthen leadership and management of the TB response in WP and NCD. Strengthening leadership, particularly at the province level will be an increasing focus of our program from 2020, including supporting the establishment of effective PHAs in NCD and WP.	<ul style="list-style-type: none"> <li>i. DFAT agrees, and notes that effort is underway by the Core Group to strengthen this forum. For example, a workshop was held in September 2019 to strengthen alignment between core partners; and core partners engaged closely on this review and the NTP review. DFAT will increase its engagement with the Core Group through 2020 to further this goal.</li> <li>ii. DFAT Managing Contractor, HHISP is working closely with NDoH to identify and appoint a suitable candidate – this will be prioritised in 2020.</li> <li>iii. DFAT will continue the process it has already begun in strengthening partner coordination in NCD and WP. For example, in 2019 DFAT supported Western Province partners to develop a joint work plan. We will work to harmonise M&amp;E arrangements in the next phase of support. NTP already organises a</li> </ul>	2019/2020

<p>technical exchange workshop (involving other provinces as relevant).</p> <p>iv. Capitalise on HSSDP initiatives including all key players participating in its governance, leadership and management development programs from 2019.</p>			<p>quarterly meeting on Programmatic Management of Drug Resistant TB (PMDT) involving other provinces – DFAT will consult with NDOH and partners regarding possible further technical exchanges.</p> <p>iv. DFAT will maintain and enhance synergies between our work in TB and HSSDP. DFAT will explore key PHA participation in governance, leadership and management programs.</p>	
<p><b><u>Data and Research</u></b></p> <p><b>4. Invest in enhanced data collection and analysis for a data-informed approach nationally and locally to guide planning, monitoring and implementation and continuous improvement.</b></p> <p>i. Formalise and implement the WP Data Utilisation Agreement and WP Data Transition Plan in Q1 2019.</p> <p>ii. Assess data ownership, access and use in NCD to ensure no similar issues to WP, in Q2 2019.</p> <p>iii. Conduct economic analyses of the TB response annually in WP and NCD and monitor trends from 2019, complementing the optimal decision science tool.</p> <p>iv. Incorporate investment in enhanced data collection and analysis in the new national TB strategic plan to be developed in 2019.</p> <p>v. Support an annual TB research forum to develop a rolling three-year TB research agenda, agreed by all and a capacity development plan for its achievement, both</p>	<p>Agree</p>	<p>DFAT agrees with the recommendation that partners enhance data collection, analysis and use.</p>	<p>i. Burnet Institute, with DFAT support, is progressing the WP Data Utilisation Agreement and WP Data Transition Plan in consultation with Western PHA. DFAT will continue to monitor progress on this issue.</p> <p>ii. DFAT, NCD, World Bank and other partners are working together to ensure no similar issues to WP occur in NCD.</p> <p>iii. DFAT is supporting economic analysis of the TB response in WP and NCD through our support for Burnet Institute and the emergency TB project.</p> <p>iv. Enhancing data collection and analysis will be prioritised through the next National TB Plan, and DFAT will support implementation.</p> <p>v. NTP should lead on implementation of this recommendation. There is an annual medical symposium where TB research is presented – potentially this activity could be progressed in this forum. Subject to a request from NTP, DFAT could consider supporting a specific forum.</p>	<p>2019/2020</p>

to be reviewed and updated annually (from 2019).				
<p><b>Gender and Social Determinants</b></p> <p><b>5. Invest in better understanding the social and gender dynamics around TB infection and health seeking behaviour to guide targeted interventions.</b></p> <p>i. Ensure all data are sex disaggregated and used for all reporting and monitoring, from Q2 2019.</p> <p>ii. Invest further in studies, research and analyses to understand (i) whether the demographic profile of those diagnosed with TB matches the profile of those infected with TB and (ii) the TB health seeking behaviours of men and women from 2019.</p>	Agree	DFAT is committed to ensuring that our investments have a positive impact on gender, and adequately consider social determinants. DFAT agrees with the recommendation that we invest in a better understanding of these issues to guide interventions in the TB program.	<p>i. DFAT requires all partners to provide sex-disaggregated data in reports</p> <p>ii. DFAT will prioritise research on gender dimensions of TB treatment as part of our next phase of support.</p>	2019/2020
<p><b>6. Advocate for funding for investments with long-term impact on TB fundamentals: investments in the underlying social determinants that create an environment where TB flourishes.</b></p> <p>i. Engage with the commercial sector for their support to GoPNG to reduce crowded housing and improve living conditions in WP and NCD (from 2019).</p> <p>ii. Consider embedding health improvement initiatives in all DFAT economic programs and discussing a cohesively similar and synergistic approach with development partners (from 2019).</p>	Agree	DFAT agrees with the recommendation that we take a holistic approach to health that takes into account social determinants such as housing, education and nutrition. DFAT engages in a range of sectors in WP and NCD, which aim to positively impact on social determinants which impact on TB. However, we note that no one donor can	<p>i. DFAT invests in a range of sectors in WP and NCD, for example WASH, infrastructure, health system strengthening, law and justice, and education, which will support better living conditions in WP and NCD. We look for opportunities to engage with the private sector and leverage additional financing for WP and NCD.</p> <p>ii. DFAT's economic programs include a focus on other sectors, for example agriculture investments also focus on health and nutrition. We are engaging with other development partners to ensure a cohesive approach that maximises health outcomes for WP and NCD.</p>	2019/2020

		adequately address all underlying social determinants given the limited budgetary capacity.		
<p><b><u>Future DFAT Support</u></b></p> <p><b>7. Given the gravity of the TB situation in PNG, DFAT continue its TB support for 7-10 years using a comprehensive program approach incorporating all DFAT TB funding, with a clear, integrated results and monitoring and evaluation frameworks, clear management and accountability arrangements, and strong focus on local leadership.</b></p> <p>In addition to the recommendations above, DFAT consider, in 2019, as inputs to the proposed 2020-2025 DFAT TB investment design:</p> <p>i. Reducing LTFU in NCD</p> <ul style="list-style-type: none"> <li>▪ Commission an analysis of (i) the disconnect between PMGH paediatric and adult outpatients and community-based services and outreach in NCD in Q2 2019, and (ii) providing expert resources to develop efficient referral mechanisms in Q2/3 2019.</li> <li>▪ To support this, invest in the Child TB Project at PMGH to provide training on TB paediatric care to community-based implementing partners in NCD during 2019 and beyond.</li> <li>▪ Include in implementing partner discussions in NCD, and in contracts as required, the need for interdependence</li> </ul>	Agree in part	DFAT agrees to continue its TB support and will begin designing a next phase beginning 2020. DFAT agrees in principle to continue TB support for the next 7-10 years, however a commitment of that length of time is beyond the scope of forward estimates and therefore subject to possible changes to Government policy and aid allocations.	DFAT will give detailed consideration to all recommendations i to ix as part of the design of the next phase of TB support in PNG. Our detailed design process will begin in early 2020 and will involve thorough consideration of existing and future analysis on the TB program. We will be guided by the new National TB Plan, which is currently under development, and will undertake thorough consultation with the PNG Government and partners.	2019/2020

<p>across boundaries for patient flows and good referral mechanisms including between community-based services and they and PMGH to aid service coordination and the patient journey.</p> <ul style="list-style-type: none"> <li>ii. Use the planned Daru and NCD behavioural study led by the PNG Institute of Medical Research to inform the proposed design.</li> <li>iii. Assess DGH infrastructure improvements possibilities including staff accommodation.</li> <li>iv. Commission a root cause and economic analysis on patient flow to maximise TB X-ray efficiency in PMGH.</li> <li>v. Commission a root cause analysis towards achieving GeneXpert same day turn-around-time of test results (community and hospitals).</li> <li>vi. Require integrated annual planning and M&amp;E of the implementing partners in WP and in in NCD.</li> <li>vii. If the WP TB leadership position remains unfilled, designate one of the three implementing partners to act as local leader of the WP implementing partners in the interim.</li> <li>viii. Request relevant implementing partners to include TB training for multidisciplinary staff along the patient journey in hospitals in their 2019 work plans.</li> <li>ix. Review the cost imposts on WP for patient transfers from Queensland Health facilities such as those nearby in the Torres Strait.</li> </ul>				
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