

STRENGTHENING PACIFIC HEALTH SYSTEMS:

Evaluating ten years of Australia's support

December 2019

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Photo: Group of Tongan nurses in a class room taking part in an Australian funded training program at Vaiola Hospital in Nuku'alofa, Tonga.

Photo: Connor Ashleigh.

The Office of Development Effectiveness (ODE)

ODE is a unit within DFAT that monitors the quality and assesses the impact of the Australian aid program. ODE conducts independent evaluations of Australian aid and quality assures DFAT's aid monitoring and performance systems and data. ODE also supports DFAT program areas to conduct evaluations. The Independent Evaluation Committee (IEC) oversees ODE's work, providing independent expert advice on DFAT's Aid Evaluation Policy, the annual Aid Evaluation Plan, ODE's strategic evaluations, and ODE's annual work plan and activities.

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Foreword

Good health is important for both individuals and countries to reach their full potential.

Well-functioning health systems enable countries to provide the health services people need. While child mortality has declined substantially in the seven Pacific island countries in this evaluation, challenges remain, including the impact of non-communicable diseases (NCDs).

Pacific island health ministers are committed to strengthening primary health care and preventive services, so they achieve the Healthy Islands vision and universal health coverage (UHC) of essential services by 2030.

Australia has a significant health footprint in the Pacific region. This evaluation assesses how effective Australia support has been in strengthening health systems in the Pacific island focus countries, through country programs administered by the Department of Foreign Affairs and Trade (DFAT). It also asks how Australian support can do better.

Over the evaluation period—2008–09 to 2017–18— coverage of essential health services in the seven focus countries gradually increased, and Australia contributed to making Pacific island health systems stronger.

Australia, for example, contributed to a substantial increase in the numbers of doctors, nurses and midwives working in the focus countries, as well as the number being trained and the quality of that training in Pacific island institutions. Australia has also contributed to stronger health information systems in several focus countries, better distribution of pharmaceuticals and improvements in health sector planning, budgeting and financial management. Australia has also contributed to health services reform. These are real achievements.

Going forward, however, this evaluation recognises the significant gap between progress and what it will take for these Pacific island countries to achieve UHC. This evaluation does not propose a magic bullet or reach for a technical solution. Instead, it recognises that health systems cannot be strengthened from outside, so how DFAT works with Pacific island countries is critical.

This evaluation backs taking partnerships to a new level, with DFAT seriously thinking about what is needed to support these countries to drive the changes needed. I commend this report to you, not as a report calling for more of the same, but as a report that challenges DFAT to work differently, for the betterment of health systems and health in the Pacific.

Dr Wendy Jarvie

Member, Independent Evaluation Committee

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ODE thanks the many DFAT staff in Canberra and at Post who supported the evaluation and made informed contributions throughout its development. Particular thanks to Dr Stephanie Williams, DFAT's Principal Health Specialist, for her critical advice and review of numerous drafts, and for DFAT staff at Honiara, Nuku'alofa and Suva posts for arranging field visits and providing supplementary information.

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The evaluation was undertaken by a team comprising Annalize Struwig, Naomi Blight, Tom Fredriksson, IOD ARC consultants, and independent consultants Deborah Rhodes and Debbie Sorensen. Debbie Sorensen, the team's Pacific health expert, brought invaluable Pacific knowledge and experience to the evaluation. Sue Elliott, from ODE, managed and participated in the evaluation with the assistance of Gina De Pretto and Brian Dowling. Dr Ann Larson, Senior Technical Lead, Specialist Health Service, Abt Associates, made a significant contribution to analysis and report writing. Dr Jim Tulloch, independent consultant, provided advice on the evaluation and commented on drafts of the report.

Acronyms and abbreviations

AQC Aid Quality Check

AusAID Australian Agency for International Development

DFAT Department of Foreign Affairs and Trade

DHIS District Health Information System

FAQC Final Aid Quality Check

Fiji Pharmaceutical and Biomedical Services Centre **FPBSC**

Fiji Health Sector Improvement Program **FHSIP**

FHSSP Fiji Health Sector Support Program

Health Sector Support—Phase 1 (Solomon Islands) HSSP2 HSSP2 Health Sector Support—Phase 2 (Solomon Islands) HSSP3 Health Sector Support—Phase 3 (Solomon Islands)

IHME Institute for Health Metrics and Evaluation

MDGs Millennium Development Goals МоН

Ministry of Health (Tonga)

MOHM Ministry of Health and Medical Services (Fiji)

MHMS Ministry of Health and Medical Services (Kiribati, Solomon Islands)

M&E Monitoring and evaluation **NCD** Non-communicable disease NGO Non-government organisation **ODA** Official Development Assistance ODE Office of Development Effectiveness **PACTAM** Pacific Technical Assistance Mechanism

PASA Pacific Islands Health Sector Program of Advisory Services and Analytics

PHIS Public Health Information System (Fiji)

Performance-linked funding PLF

PNG Papua New Guinea

Quality at implementation OAI SDGs Sustainable Development Goals SDI Social Development Index

SPC **Pacific Community SWAp** Sector-wide approach

TB **Tuberculosis**

THSSP1 Tonga Health Systems Support Program—Phase 1 THSSP2 Tonga Health Systems Support Program—Phase 2

UHC Universal Health Coverage **WHO** World Health Organization

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Executive summary

Good health is essential to sustained economic and social development and poverty reduction. It is a fundamental value of Pacific island countries, enshrined in the Healthy Islands vision endorsed by Pacific health ministers in 1995.

From 2008–09 to 2017–18—the evaluation period—Australia provided \$402 million in Official Development Assistance (ODA) for country health programs in Fiji, Kiribati, Nauru, Samoa, Solomon Islands, Tonga and Vanuatu. Australia is the largest development partner working in health in these seven Pacific island countries (except Tonga, where Japan contributed a similar amount).

Australia invests in the health of its Pacific island neighbours because it:

- » contributes to health outcomes that improve productivity and enable economic growth and development
- » helps keep Australia and the Pacific region safe from the spread of existing and emerging infectious diseases
- » supports countries to address gender equality and social inclusion by responding to the needs of women, children and the most marginalised, including remote communities and isolated small islands and people living with a disability
- » fosters people-to-people links between Pacific island countries and Australia.

The Office of Development Effectiveness (ODE), within DFAT, commissioned this evaluation to assess DFAT's support in strengthening the health systems in these seven focus countries. Evaluation results will inform future DFAT support.

Australia's relationship with Pacific island countries

Australia's relationship with Pacific island countries continues to strengthen.

The 2017 Australian Foreign Policy White Paper states Australia's commitment to 'step up' its engagement with Pacific island countries. Partnership initiatives being developed recognise the need for new approaches and a higher level of support from Australia to help address the region's major economic, security and development challenges.

Australia's 2019–20 development assistance budget provided the largest ever contribution—\$1.4 billion to the region—of which 15.3 per cent will be spent on health.²

Frameworks for health and development

The 2030 Agenda for Sustainable Development calls for a holistic and integrated approach to tackling global challenges, while focusing on achieving equity, articulated as 'leave no-one behind'.

Within this context, the agenda's health goal (SDG 3) is 'Ensure healthy lives and promote wellbeing for all at all ages.' SDG 3 has 13 health targets. Target 3.8 is achieving UHC, which, in 2017, Pacific island health ministers committed to progressing. Australia has demonstrated over many years it is also committed to achieving UHC.

UHC means that all people receive the health services they need, including public health services designed to:

- » promote better health, such as anti-tobacco information campaigns and taxes
- » prevent illness, such as vaccinations
- » provide treatment, rehabilitation and palliative care, such as end-of-life care.

¹ WHO. https://www.who.int/healthsystems/universal_health_coverage/en/

² DFAT (2019). Australian Aid Budget Summary 2019–20, p. v.

UHC should be of sufficient quality to be effective, while ensuring that the use of health services does not expose the user to financial hardship.³ All countries need to tailor what UHC means in their own context.

Three health and development policies and strategies guided DFAT's development assistance during the evaluation period:

- 1. Helping Health Systems Deliver policy, 2006
- 2. Saving Lives policy, 2011
- 3. Health for Development Strategy 2015–2020.

These emphasised the importance of supporting Pacific island countries to strengthen their own national health systems by financing, managing and delivering equitable health services, while balancing other priorities, including tackling specific health problems and ensuring regional health security.

About the Pacific

On a foundation of thousands of years of successful existence, rich cultural and community life, and engagement with external influences, Pacific island countries face opportunities and threats.

Pacific island countries have substantial natural resources. They are rich in cultural diversity and are rapidly increasing their trade and digital links with global markets. Remittances from those who have moved overseas to work are contributing to family and community prosperity. However, Pacific island countries, the focus of this evaluation, face development challenges. They are physically detached from major markets; have small populations spread across many islands (with the exception of Nauru); are confronting the worst impacts of climate change; are some of the most vulnerable countries to natural disasters in the world; are, at times, prone to political instability within borders; and have changing geopolitical landscapes.

Health in the Pacific

Health is a major issue in Pacific island countries.

Child mortality declined substantially in the focus countries throughout most of the evaluation period. Unfortunately, this has not led to longer healthier lives. Life expectancy has increased by one or two years at best. Persistent high adult mortality increased in most focus countries, the result of NCDs such as cancer, diabetes and heart disease. These diseases cause early deaths among Pacific Islanders, as well as disabilities such as amputations and blindness.

The Pacific island focus countries have improved health service coverage for their populations over the past two decades. As Figure 1 shows, coverage increased throughout the evaluation period (shaded in grey) in the six countries for which data were available. Comparable data were not available for Nauru.

The UHC service coverage index is a global SDG indicator and composite measure that tracks progress in coverage of essential health services.

Evaluation purpose and methods

Australia's support for strengthening health systems, as administered by DFAT, was the focus of this evaluation.

The evaluation looked at what worked to support Pacific island countries to strengthen their health systems and how DFAT can do better.

The evaluation was structured around these inter-related evaluation questions:

- » What health programs did DFAT fund in the seven Pacific island countries?
- » What were the key characteristics of DFAT's major country health programs for strengthening health systems?
- » Have DFAT's major country health programs contributed to strengthening health systems?
- » Which DFAT ways of working have helped or hindered strengthening health systems?
- » How can DFAT enhance the contribution of its health programs in the Pacific islands?

³ WHO and the World Bank (2017). Tracking Universal Health Coverage: 2017 Global Monitoring Report, p. xii.

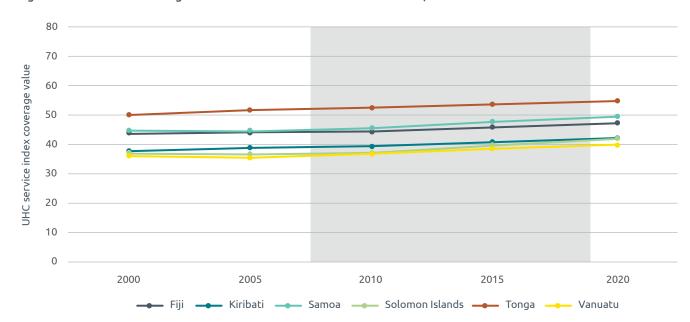


Figure 1: UHC service coverage index for six Pacific island focus countries, 2000–2020

Note: Coverage index for essential health services (based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access). Area shaded in grey is the evaluation period—2008–09 to 2017–18.

Chart: DFAT. Source: IHME (2019). Global Burden of Disease Study 2019. https://vizhub.healthdata.org/sdg/ Accessed 9 April 2019.

The evaluation team used a strengths-based approach to collect data and report. Five analyses addressed the inter-related evaluation questions. Findings drew on combined evidence from all data sources.

The evaluation team visited Fiji, Solomon Islands and Tonga and analysed documentation for Kiribati, Nauru, Samoa and Vanuatu. Triangulation revealed a substantial level of agreement between data sources. Draft findings and recommendations were further validated with senior officials of six of the focus countries.

What did DFAT fund in health?

DFAT provided \$689 million in total assistance for the focus countries during the evaluation period, through four types of funding:

- » country (\$402 million)
- » regional (\$71 million)
- » global programs (\$40 million)
- » Oceania unspecified (\$176 million), programs with a broader geographical focus.

While DFAT continuously supported health development in the seven focus countries, some changes were made in the amount and type of funding. These reflected changing Australian Government development policy.⁴

Over the evaluation period, the proportion of funding between types of programs changed:

- » country programs declined
- » regional and global programs increased
- » Oceania unspecified programs declined.

⁴ The Australian Government decision to cap Official Development Assistance expenditure and integration of the Australian Agency for International Development (AusAID) into DFAT.

DFAT made a substantial financial contribution to the health systems of all seven countries. This ranged from more than one-third of total health expenditure in Solomon Islands, to less than four per cent in Fiji.⁵

Over the evaluation period, DFAT had 109 programs (63 country, 24 regional and 22 global), excluding Oceania unspecified. This large number was at times complex for the countries and DFAT posts to deal with.

What were the key characteristics of DFAT's major country health programs?

The majority of country program funding was purposefully channelled through 15 major health programs with broad remits, often with five-year life cycles, which were repeated. These 'umbrella programs' could, as a result, contribute more effectively to a range of health system strengthening activities.

Larger programs, in Solomon Islands and Vanuatu, provided a higher level of support to a range of activities to strengthen health systems. Other country programs, especially the smaller ones, were more selective. In Kiribati and Tonga, funding for health services, and 'other supporting activities', made up most budgets.

All countries required some 'other supporting activities' through the evaluation period. These critical inputs to service delivery included support for:

- » building or repairing health facilities
- » employing staff
- » buying and installing major equipment
- » buying vaccines, drugs, medical supplies and other consumables.

While long-term investment in broad health system strengthening is DFAT's priority, support for some short-term demands or highly focused disease-oriented programs was provided, for humanitarian or other reasons.

Has DFAT assistance contributed to strengthening health systems?

Overall, evidence of DFAT's contribution included improved performance in country health systems in:

- » governance and leadership
- » health financing and public financial management
- » health information systems
- » health services.

DFAT also contributed to strengthening the capacity of individuals and institutions, especially through health workforce training institutions and scholarships. Improved coordination and planning between the scholarship program and human resource priorities of health ministries will further maximise the value of scholarships in addressing gaps in the health workforce.

For five of the seven countries, most programs scored an average of satisfactory or higher on effectiveness across the evaluation period, according to DFAT's internal quality reporting system. Exceptions were major programs in Nauru and Samoa. The team's deeper examination of program documentation indicated this finding was credible and backed by examples.

DFAT's contribution to strengthening health system performance was evaluated in more detail in Fiji, Solomon Islands and Tonga, the three countries visited. Performance improvements associated with DFAT support in these three countries included:

- » increased numbers, qualifications and management of the Pacific island health workforce
- » significant improvements in health information systems in Fiji and Solomon Islands
- » strengthened health sector planning, budgeting and financial management in Solomon Islands
- » major improvements in the pharmaceutical supply chain management in Solomon Islands
- » development of the Role Delineation Policy in Solomon Islands, which has the potential to help guide its health system towards UHC.

⁵ IHME (2019). Development Assistance for Health Database 1990–2017. Seattle, United States. http://ghdx.healthdata.org/record/ihme-data/development-assistance-health-database-1990–2017 Accessed 9 April 2019.

The evaluation found that the performance of the health programs on incorporating gender equality and women's empowerment objectives was mixed. DFAT's important practice of conducting health-specific gender analysis to identify priorities and entry points was relatively recent.

Effectively addressing access-related barriers to health services, including those that are gender-related, will be critical to achieving UHC in Pacific island countries.

DFAT's ways of working: What helped, what hindered?

The evaluation team explored DFAT's ways of working across seven key areas to assess what helped and what hindered. Broadly speaking, the evaluation found good practice under each area, as well as practices requiring improvement.

DFAT's health and development policies and strategies

DFAT's international health and development policies and strategies set the broad framework for its support for strengthening Pacific island health systems.

While performance improved across the focus countries in each health system function, DFAT has opportunities to better align its future policies and strategies with the health priorities of the seven countries, especially with growing support for UHC. DFAT has further opportunity to improve by applying the lessons learned in this evaluation.

Partnerships and relationships

Partnerships between Australia and Pacific island countries, formal and informal, are critical to DFAT's contribution to strengthening health systems.

Strategic engagement and policy dialogue around shared objectives, with the right level of representation from both sides and evidence informing discussions, contributed to stronger partnerships. It also created a supportive environment in which improvements in health systems were achieved. Where this was absent, partner countries perceived a lack of respect and mutual distrust, which inhibited frank discussion between individuals of equal standing. Lack of flexibility and adaptability in how DFAT supported countries to strengthen health systems constrained what partnerships achieved.

Country program funding—types of aid

DFAT predominately channelled its health funding through government systems. While working within partner systems has many advantages, including opportunities to strengthen them, it also has challenges. Necessary risk management requirements, for example, can involve high transaction costs that can reduce efficiency and effectiveness.

With a decade of experience, it is timely for DFAT and Pacific island countries to jointly explore opportunities and challenges of funding through government systems. Performance-linked aid in Solomon Islands also provided useful lessons for when and how to use performance-linked funding (PLF).

Approach to capacity building

DFAT's capacity-building support would be more effective if based on systematic analysis of the capacity and priorities that exist in focus countries. This would assist DFAT in determining what could reasonably be expected to be achieved in each country context.

Technical assistance was the most commonly used approach to capacity building, but efforts did not always match the nature of the issue trying to be addressed. A mix of approaches fostering Pacific leadership and innovation is more likely to be effective and sustainable.

More recent use of other approaches—especially networks and meetings for data sharing to foster technical and leadership skills and confidence of Pacific ministry and health staff—are positive developments.

Coherence within DFAT's health portfolio

DFAT posts, health ministry officials and development partners have strong views that DFAT's multiple channels of funding lack coherence and/or coordination. The evaluation team believed that providing support to health systems through country, regional and global programs would be more effective if better coordinated and more responsive to country government priorities and processes.

Monitoring and evaluation

DFAT, appropriately, relied heavily on government health information systems, supplemented by surveys and other data collection, to monitor its programs.

Even with significant investment and improvement in information systems, however, it was difficult to link program inputs to outcomes and impact. This reflects a number of deficiencies, including in qualitative evaluation, operational research, and research capacity development. These need to be addressed to better understand health system and program progress.

DFAT and Pacific island governments need to be clearer on the purpose of monitoring and evaluation (M&E).

DFAT capacity development

Expanding DFAT's good practices in supporting countryled priorities for strengthening health systems will require technical health, development (including an understanding of working in partner systems) and Pacific expertise.

Access to technical health expertise varied considerably over the evaluation period, yet it is considered critical to designing and implementing effective health programs. DFAT has also underused the expertise of locally engaged DFAT staff and not adequately recognised the strong leadership available from Pacific people, including diaspora, as national and/or regional experts.

How can DFAT enhance its contribution?

While health systems in focus countries strengthened during the evaluation period, much is still needed. If present slow trends continue, all seven focus countries will fall far short of achieving UHC service coverage by 2030.

This evaluation highlights the importance of partnerships and ways of working together to achieve stronger health systems. It identified five strategic areas for improvement, along with recommendations.

Strategic area 1: Making universal health coverage central

Consistent with the 2030 Agenda for Sustainable Development, and its holistic and integrated approach to tackling global development challenges, DFAT's health investments in Pacific island countries should focus on achieving UHC.

Recommendation 1

DFAT's next health strategy should articulate UHC as the overarching goal of its health commitment in Pacific island countries, recognising the importance of primary health care and including public health services designed to promote better health and prevent illness.

DFAT should:

- » support country tailored, strategic approaches
- » embrace the SDG principle that no-one should be left behind by any country's health system and address barriers to access, including gender-related barriers
- » be clear that continued support for sustainable health system strengthening is Australia's preferred approach
- » recognise that efforts may at times require supporting critical inputs to service delivery (health facilities, staff, equipment and consumables) to provide the foundations upon which to build stronger health systems and achieve UHC.

Strategic area 2: Taking partnerships seriously

DFAT needs to act on the reality that partnerships between Australia and Pacific island governments are critical for effective development investments. Pacific island countries spoke of positive, long-term relationships with Australia, which need to be taken to the next level. Partnerships must be equal and work collaboratively, demonstrating shared responsibility and mutual accountability.

To help build and maintain solid partnerships, DFAT must understand context, be open to engaging with partners and be clear about its choices in development assistance.

Recommendation 2

DFAT should have more deliberate and structured partnerships with Pacific island health partners. This should include strategic and programming governance arrangements, and ongoing monitoring of partnership quality.

DFAT should also:

- » Engage with partners on, and be more transparent about, the rationale behind its choices to help maintain trust. This:
 - requires DFAT to engage with partners on choices, and assess trade-offs and consequences of investment choices during planning
 - includes choices between health systems strengthening and support for short-term demands or highly focused disease-oriented programs
 - includes choices between country versus regional or global programming.
- » Jointly explore with Pacific island governments lessons learned on working in partner systems and lessons learned with PLF, including:
 - the inherent trade-offs between opportunities and challenges
 - co-designing future programs to help develop effective and efficient Pacific island funding modalities.

- » Aim for all health investments to be consistent with, and reinforce where possible, Pacific island government health plans, processes and structures, for better decision making at country and regional levels.
 - All health investments should be included in DFAT country-level aid investment plans to encourage improved coordination and coherence of health investments.
- » Invest in building country capacity to engage and fully participate in partnerships with DFAT.
 - This includes mentoring, providing administrative support and mechanisms to access evidence and current best practice.

Strategic area 3: Driving change through knowledge and evidence

DFAT needs to be deliberate in its support to countries to drive change through knowledge and evidence. Generating, analysing and using sound information and data is critical to informing health system strengthening.

Recommendation 3

DFAT should continue to support and use Pacific island government health information systems recognising that they, along with other health system building blocks, such as human resources and financing for health, are essential foundations.

DFAT should also:

- Explore, where appropriate, a whole-of-government approach to information systems (for example, human resources).
- » Adopt a structured approach to investing in more analytical and research capacity within Pacific island countries.
- » Evaluate its own programs by fostering co-analysis of program effectiveness and associated decision making. This should, in turn, be used to inform future investment.

Strategic area 4: Investing in Pacific island leaders and solutions

DFAT needs to invest in Pacific island leaders working in ministries and health services since they are ultimately responsible for leading and implementing long-term improvements in health systems.

Supporting Pacific leadership, individually or collectively, is more than funding leadership courses; it requires a tailored approach taking contextual factors that influence leadership into account.

Solutions to local health challenges can be found locally, even in low-resource settings, through the involvement of people who know the context well and have ready access to technical or other assistance.

Recommendation 4

DFAT's contribution to Pacific island health systems should prioritise investment in Pacific island leaders working in ministries and health services, including clinical and managerial cadres. DFAT should do this at all levels.

DFAT should prioritise nursing cadres as they are the backbone of Pacific health systems.

Recommendation 5

DFAT should base its capacity-building investments on joint analysis of needs and priorities of what could reasonably be expected to be achieved in each country context. This means moving beyond heavy reliance on technical assistance to using a mix of approaches, including:

- » encouraging and supporting Pacific island countries to lead innovations to address health system challenges
- » making greater use of Pacific diaspora, as technical advisers for program design and evaluation.

Strategic area 5: Lifting DFAT performance through team effort

DFAT should continue to focus on the quality of leadership, joint governance and the quality and performance of investments so its contributions to Pacific island health systems achieve maximum benefit. This will not happen without expertise in health and development and a deeper understanding of Pacific island country context as part of, or accessible to, DFAT teams.

Recommendation 6

DFAT should strengthen its own technical, development and Pacific island-related capacity, and quality assure external technical health expertise provided. This is essential to supporting Pacific island partnerships and programs.

Possible mechanisms to achieve this could include:

- » ensuring that all DFAT teams providing health advice and managing programs include, or have access to, health, development and Pacific island expertise, such as the skills needed to facilitate genuine partnerships
- » increasing the number and seniority of Pacific island health professionals in DFAT posts and as advisers (locally engaged or from the Pacific diaspora in Australia and in the region)
- » appointing a senior Pacific island health adviser to support and mentor DFAT staff and engage Pacific island governments.

Management response

Summary

The Department of Foreign Affairs and Trade (DFAT) welcomes the *Strengthening Pacific health systems:* Evaluating 10 years of Australia's support.

The evaluation—requested by DFAT—makes an important contribution to strengthening the effectiveness of DFAT's health assistance to the Pacific. The evaluation's findings and recommendations will support efforts to plan, implement, monitor and evaluate ongoing and new health investments across the region.

DFAT notes that this evaluation covers a period of significant change in policy and resourcing, including the integration of the Australian Agency of International Development (AusAID) into DFAT in 2013. Despite these changes, DFAT recognises the common themes around which the evaluation is organised and welcomes the constructive findings and recommendations it presents.

Since the review period, DFAT's engagement in the Pacific has deepened through the Pacific Step-up, designed to take partnerships with the region to a new level. As the Step-up progresses, DFAT has enhanced opportunities to engage in a more deliberate and structured way on issues of greatest concern to Pacific island nations, including in the area of health. This evaluation provides practical guidance to help do this.

DFAT agrees with four recommendations (2, 3, 4 and 5) put forward in the evaluation report and agrees in principle with two recommendations (1 and 6).

DFAT welcomes the finding that it has made an important contribution to improving health systems of the seven countries⁶ covered by this evaluation. This includes in areas such as governance and leadership, financing and public financial management, information systems, and front-line health services.

DFAT recognises there is room for improvement on a number of key issues vital to enhancing the relevance, impact and sustainability of its Pacific health investments. These include:

- » greater coherence within DFAT's aid investment in each country (across DFAT's country, regional and global aid programs)
- » stronger, more explicit focus on universal health coverage (UHC) to address inequitable access to Pacific health services
- » enhanced commitment to support and use Pacific island government health information systems
- » renewed efforts to undertake joint analysis of needs and priorities to inform health capacity building support.

Tangible actions—both planned and already underway—to address these and other issues are outlined in this management response table.

⁶ Fiji, Kiribati, Nauru, Samoa, Solomon Islands, Vanuatu and Tonga.

Management response to each recommendation

Recommendation	Response	Explanation	Action plan (include responsible areas and timeframes in brackets at the end of each action)
1. DFAT's next health strategy should articulate UHC as the overarching goal of its health commitment in Pacific island countries, recognising the importance of primary health care and including public health services designed to promote better health and prevent illness. DFAT should: » support country tailored, strategic approaches » embrace the SDG principle that no-one should be left behind by any country's health system and address barriers to access, including gender-related barriers » be clear that continued support for sustainable health system strengthening is Australia's preferred approach » recognise that efforts may at times require supporting critical inputs to service delivery (health facilities, staff, equipment and consumables) to provide the foundations upon which to build stronger health systems and achieve UHC.	Agree in principle	DFAT recognises the value and relevance of the concept of UHC globally and to health systems development in the Pacific. Where appropriate, DFAT will continue to support Pacific island countries' own approaches to UHC through bilateral health system strengthening programs recognising Pacific island countries have themselves committed to achieve UHC. The Minister for Foreign Affairs and Minister for Women, Senator, the Hon Marise Payne, and Assistant Defence Minister and Minister for International Development and the Pacific, the Hon Alex Hawke MP, have announced a consultation process to guide a new Australian development policy. This policy will drive the Australian Government's international development efforts in support of security, stability, prosperity and resilience in the Indo-Pacific region. This process will consider how best to incorporate the Sustainable Development Goal (SDG) principle that no-one should be left behind. DFAT recognises that inputs to service delivery (including infrastructure facilities and commodities) are occasionally necessary to support its efforts to strengthen health systems in the Pacific and respond accordingly through relevant bilateral and regional programs.	New and ongoing bilateral health systems strengthening programs in the Pacific will continue to support respective partner strategic approaches to UHC. Examples include: "Vanuatu Health Program (2019–2022), which will support Vanuatu's UHC agenda with a strong focus on systems strengthening, public health, workforce development and provincial service delivery. "Solomon Islands Health Sector Support Program (2016–2020), with a focus on systems strengthening, UHC and primary health care, demonstrated by the requirement that 40 per cent of budget support is allocated to provincial health services. "Planned new health program in Tonga (starting in 2020) that will consider how to support Tonga's priority to achieve UHC. The new Australian development policy will detail the strategic priorities for Australia's official development assistance, including within the health sector, and may also cover the overarching priorities for the Pacific. (Human Development and Governance Division, in consultation with the Office of the Pacific [OTP], by March 2020) Continue to consider and use a range of measures—both technical assistance and service delivery inputs—within DFAT's Pacific health investments. This will be considered through the investment design cycle, annual DFAT monitoring (primarily Aid Quality Checks) and periodic independent evaluations. (All programs, ongoing)

Recommendation	Response	Explanation	Action plan (include responsible areas and timeframes in brackets at the end of each action)
2. DFAT should have more deliberate and structured partnerships with Pacific island health partners. This should include strategic and programming governance arrangements, and ongoing monitoring of partnership quality. DFAT should also: » Engage with partners on, and be more transparent about, the rationale behind its choices to help maintain trust. This: – requires DFAT to engage with partners on choices, and assess trade-offs and consequences of investment choices during planning – includes choices between health systems strengthening and support for short-term demands or highly focused disease-oriented programs – includes choices between country versus regional or global programming.	Agree	DFAT agrees that a more deliberate and structured approach to health engagement with its Pacific partners will strengthen alignment with their priorities. The deepened engagement with Pacific island countries through Pacific Step-up provides new opportunities to enhance programming governance and strive for stronger health partnerships. DFAT is committed to building relationships based on mutual respect and transparency as the foundations for sustainable partnerships on health, which is strongly aligned with the Step-up principles. This must include recognising and leveraging at country-level all health support provided by DFAT through its country, regional and global programs. Stronger engagement with DFAT Pacific partners ahead of, and through the design stages of, new health investments will help drive its commitment to stronger health partnerships, including considering ways to build capacity within Pacific health partners to make the most of that engagement.	Future health designs for the Pacific will engage more closely with Pacific partners and provide, where possible, capacity-building support to facilitate such engagement. (All relevant programs, ongoing) With support from DFAT's Multilateral Health Strategy and Partnership Section, all Pacific bilateral programs will acknowledge in new planning and strategy documents the totality of DFAT's health investments through its country, regional and global programs. This will support enhanced coherence between country, regional and global health programs. (All programs, by March 2020) The quality of health partnerships in the Pacific will be assessed annually, in line with standards outlined in the performance framework for Australian aid. Aspects of this performance framework will be updated to align with the new Australian development policy under development. Selected examples of programs addressing this recommendation include: 3 Governance mechanisms for the Solomon Islands Health Sector Support Program, which features bi-annual development partner meetings to agree on performance indicators and monitor performance. This includes the calculation of performance-linked funding. Seventy-five per cent of total program allocation is provided as budget support. The program predominantly uses government health information systems for monitoring performance, including reform indicators.

Recommendation	Response	Explanation	Action plan (include responsible areas and timeframes
			in brackets at the end of each action)
 Jointly explore with Pacific island governments lessons learned on working in partner systems and lessons learned with PLF, including: the inherent trade-offs between opportunities and challenges 			» The Vanuatu Health Program provides funding that is on-budget and on-system, aligned directly with the Vanuatu Government's health strategy and Ministry of Health business plan. Strategic governance arrangements include a Health Sector Steering Committee comprising government and development partners that meets
 co-designing future programs to help develop effective and efficient Pacific island funding modalities. 			bi-annually to ensure development partner coherence with national policy, the emerging reform agenda and business plans. » Based on a strong partnership
 Aim for all health investments to be consistent with, and reinforce where possible, Pacific island government health plans, processes and structures, for better decision making at country and regional levels. All health investments should be included in DFAT country-level aid investment plans to encourage improved coordination and coherence of health investments. 			approach, the Kiribati–Australia Health Sector Program (2010–2020) enhances the Kiribati Government's capacity to control communicable diseases and reduce disability. The program works closely with the Kiribati Government to strengthen the administration of its national health system and respond to national health threats. (Ongoing)
 Invest in building country capacity to engage and fully participate in partnerships with DFAT. This includes mentoring, providing administrative support and mechanisms to access evidence and current best practice. 			

Recommendation	Response	Explanation	Action plan (include responsible areas and timeframes in brackets at the end of each action)
3. DFAT should continue to support and use Pacific island government health information systems recognising that they, along with other health system building blocks, such as human resources and financing for health, are essential foundations.	Agree	DFAT recognises the value of supporting Pacific countries to develop their established health information systems (HIS) and make better use of the data and intelligence generated by these systems in strategic planning and budgeting.	DFAT will engage closely with Pacific partners at strategic level (for example, state-of-play of the health sector, and choices and trade-offs) and operational level (for example, designs) and provide, where possible, capacity-building support to facilitate such engagement. (All programs, ongoing)
 » Explore, where appropriate, a whole-of-government approach to information systems (for example, human resources). » Adopt a structured approach to investing in more analytical and research capacity within Pacific island countries. » Evaluate its own programs by fostering co-analysis of program effectiveness and associated decision making. This should, in turn, be used to inform future investment. 		DFAT encourages a whole-of-government approach in Pacific island countries that takes advantage of sustainable new technologies or works to realise the full benefits of current technologies. DFAT agrees that systematic efforts to develop the analytical capacity of Pacific health partners is crucial to sustainable improvement. DFAT appreciates the importance of ensuring closer collaboration with Pacific health partners for future evaluations of its joint health programs.	All future Pacific health evaluations will be structured to include Pacific island countries as central stakeholders. This will include measures such as jointly developing and approving evaluation plans. Where possible, data generated by Pacific island country HIS will be used to evaluate health investments. This will be supplemented, as necessary, with qualitative and operational research to better understand progress. (All programs, ongoing) The Tonga Health Systems Support Program (2015–2020) is funding the implementation of a new platform for digital public health reporting to streamline reporting and analysis of health information. This supports more robust government decision making. The program is committed to increasing the use of strategic information to inform planning and budgeting of Tonga's domestic health resources.

Recommendation	Response	Explanation	Action plan (include responsible areas and timeframes in brackets at the end of each action)
4. DFAT's contribution to Pacific island health systems should prioritise investment in Pacific island leaders working in ministries and health services, including clinical and managerial cadres. DFAT should do this at all levels. DFAT should prioritise nursing cadres as they are the backbone of Pacific health systems.	Agree	DFAT strongly agrees that continued and enhanced support to partner government health leadership—across all levels—is vital to enable delivery of health services to the most vulnerable. Prioritising support for nursing cadres is an important element of these efforts, although subject to Pacific island country views on priorities and resources.	All programs focused on Pacific health systems will continue to identify key local leaders and champions for change to provide targeted support to these groups. Programs will assess different types of support for leaders, to explore which is most effective. Current examples demonstrating DFAT commitment to these issues include: » Under the Solomon Islands Health Sector Support Program (HSSP3), DFAT will support several candidates to complete the Health Leadership Management Training course, designed specifically for Solomon Islands (through the World Health Organization) and delivered at the Solomon Islands National University. DFAT will consider ongoing support for this course in the new phase of HSSP (from 2021). » DFAT has provided sustained clinical and non-clinical workforce support in Vanuatu since 2010. This includes support to the Vanuatu College of Nursing, leadership and management training of national senior doctors and managers, internship training, and international locum support to help develop a skilled health workforce and fill critical gaps. » The Tonga Health Systems Support Program prioritises training and education for government staff across a range of health areas, including support for Tonga's first cadre of Family Medicine trainees through a collaboration with Fiji National University. (Ongoing)

Recommendation	Response	Explanation	Action plan (include responsible areas and timeframes in brackets at the end of each action)
5. DFAT should base its capacity-building investments on joint analysis of needs and priorities of what could reasonably be expected to be achieved in each country context. This means moving beyond heavy reliance on technical assistance to using a mix of approaches, including: » encouraging and supporting Pacific island countries to lead innovations to address health system challenges » making greater use of Pacific diaspora, as technical advisers for program design and evaluation.	Agree	DFAT agrees that more systematic and joint analysis of needs and priorities with Pacific partners will improve the relevance, impact and sustainability of its health investments. A judicious mixture of measures—that still includes targeted technical assistance—is needed to ensure the effectiveness of DFAT's capacity building activities. DFAT agrees this should include support for Pacific-led initiatives. DFAT agrees that health experts with cultural and/or ethnic linkages to the Pacific—including those in the diaspora—can help sharpen the focus and actions of current and future health investments.	All programs will continue to actively involve relevant Pacific partners in the aid investment cycle—concept, design, monitoring and evaluation—to ensure DFAT support is responsive to the identified needs and priorities of Pacific island countries. (All programs, ongoing) OTP, with support from HPS, will consider developing a tool kit outlining what actions programs can take, beyond technical assistance, to support more effective collaboration on joint analysis of health needs and priorities. (OTP, by March 2020) OTP will survey health experts with cultural and/or ethnic linkages to the Pacific on barriers to greater participation by this group. Insights will inform a strategy to build further this cadre to support DFAT health investments. (OTP, by June 2020)

Chapter 1: Introduction

1.1 Purpose

Over a number of years, including the evaluation period, Australia has actively supported Pacific island country efforts to improve the health of their people. This engagement has been based on the shared understanding of the importance of good health and the connections between health, enhanced quality of life and increased economic productivity.

ODE commissioned this evaluation to examine Australia's support for strengthening health systems between 2008–2009 and 2017–2018.

The evaluation was timely because the Australian Health for Development Strategy ends in 2020, and DFAT's Office of the Pacific is stepping up Australia's engagement in the Pacific Islands.⁷

The evaluation's focus is DFAT-funded country health programs in Fiji, Kiribati, Nauru, Samoa, Solomon Islands, Tonga and Vanuatu, amounting to \$402 million over the decade. Regional and global health programs, which also supported these countries, constituted another \$71 million and \$40 million, respectively. A further \$176 million benefited the Pacific region more broadly over the decade.8

While focused on country programs, the evaluation also made observations on the contribution of other programs to country health systems.

The evaluation does not specifically address the significant investments made in health security, even though advances in this area rely heavily on health system strengthening to detect and respond to health threats. This important area was the focus of ODE's 2017 evaluation: Evaluating a decade of efforts to combat pandemics and emerging infectious diseases in Asia and the Pacific 2006–2015: Are health systems stronger?

This chapter introduces this evaluation in some detail. It outlines why Australia invests in health, its relationship with Pacific island countries, and the changes in orientation of global health. It explains why health system strengthening has been a key approach internationally to improving health for more than 20 years, and why it has been a component of all DFAT's health and development policies and strategies over the last decade. Finally, this chapter examines recent trends in Pacific island health and health service coverage.

1.2 Why Australia invests in health in the Pacific

Good health is essential to sustained economic and social development and poverty reduction. It is a fundamental value of Pacific island countries, enshrined in the Healthy Islands vision endorsed by Pacific health ministers in 1995.

Australia invests in the health of its Pacific island neighbours because it:

- » contributes to health outcomes that improve productivity and enable economic growth and development
- » helps keep Australia and the Pacific region safe from the spread of existing and emerging infectious diseases
- » supports countries to address gender equality and social inclusion by responding to the needs of women, children and the most marginalised, including remote communities and isolated small islands and people living with a disability
- » fosters people-to-people links between Pacific island countries and Australia.

The Pacific Step-up is one of Australia's highest foreign policy priorities, highlighted in Australia's 2017 Foreign Policy White Paper and 2016 Defence White Paper as of fundamental importance to Australia. The 'step-up' was first announced at the Pacific Island Forum Leaders' Meeting in September 2016 as a 'step-change' in the way Australia would engage the region: https://dfat.gov.au/geo/pacific/engagement/Pages/stepping-up-australias-pacific-engagement.aspx

⁸ Information from DFAT budget unit.

1.3 Australia's relationship with Pacific island countries

At the 2016 Pacific Islands Forum Leaders' Meeting, former Australian prime minister Malcolm Turnbull announced a 'step up' of Australia's engagement in the Pacific islands, subsequently reflected in Australia's 2017 Foreign Policy White Paper. Since then, a series of initiatives have been developed in partnership with Pacific island countries recognising the need for new approaches and a higher level of ambition from Australia to help address the region's major economic, security and development challenges.

Reflecting this evolving and maturing relationship, Australia has entered into bilateral aid partnerships with all seven countries in this evaluation. Addressing health issues is a priority in each partnership agreement, as are mutually agreed obligations.9

In addition, Samoa, Solomon Islands and Vanuatu have signed on to Australia's Pacific Medicines Testing Program, seeking support to improve their access to safe pharmaceuticals. Australian and New Zealand health ministers have been invited to join as members of the biennial Pacific health ministers' meetings, signifying a desire to recognise both countries as close partners in the region. New Zealand has also announced its Pacific Reset Policy to guide its engagement.

Finally, in the 2019–20 Budget, Australia provided \$1.4 billion in development assistance to the Pacific, its largest ever contribution to the region.¹⁰ Of this, 15.3 per cent will be spent on health¹¹, including \$61 million in the seven focus countries in this evaluation. 12 This reflects an increase of 8.4 per cent in health ODA to these countries compared to the 2018–19 estimated Budget outcome.13

1.4 Frameworks for health and development

1.4.1 Global frameworks

The orientation of global health has shifted over the past decade. Between 2000 and 2015, international development cooperation in health was driven by the three Millennium Development Goals on child mortality, maternal mortality and reproductive health, and the prevention and control of HIV and AIDS, malaria and other major diseases.

The 2030 Agenda for Sustainable Development provides an international shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are 17 Sustainable Development Goals (SDGs), which recognise that ending poverty and other deprivations must go hand-in-hand with strategies that improve health, education, reduce inequality, and spur economic growth all while tackling climate change and working to preserve oceans and forests.14

The agenda calls for a holistic and integrated approach to tackling these challenges, while focusing on achieving equity, articulated as 'leave no-one behind'.

Within this context, the agenda's health goal (SDG 3) is 'Ensure healthy lives and promote wellbeing for all at all ages.' One of the 13 health targets under SDG 3 is Target 3.8 achieving UHC, which, in 2017, Pacific island health ministers committed to progressing. Australia has demonstrated over many years it is also committed to achieving UHC in the Pacific.

UHC means that all people receive the health services they need, including public health services designed to:

- promote better health, such as anti-tobacco information campaigns and taxes
- prevent illness, such as vaccinations
- provide treatment, rehabilitation and palliative care, such as end-of-life care.

Australia entered a bilateral partnership with Fiji in September 2019. In this partnership, Australia's commitment to continue to align its health program support with Fiji's strategic objective to improve service delivery is identified under pillar five (Fostering closer institutional linkages in support of strong and inclusive societies).

¹⁰ DFAT (2019). Australian Aid Budget Summary 2019–20, p. v.

ibid., p. 10.

¹² DFAT internal source.

¹³ DFAT internal source.

¹⁴ https://sustainabledevelopment.un.org/sdgs

UHC should be of sufficient quality to be effective, while ensuring that the use of health services does not expose the user to financial hardship. 15 All countries need to tailor what UHC means in their own context.

The SDG Health Target 3.8—and its two indicators, 3.8.1 and 3.8.2—are defined in Box 1.¹⁶

Box 1: Definitions of Target 3.8—achieving UHC and associated indicators

SDG Target 3.8

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

SDG Indicator 3.8.1

Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health; infectious diseases; non-communicable diseases; and service capacity and access; among the general and the most disadvantaged population).

SDG Indicator 3.8.2

Proportion of population with large household expenditures on health as a share of total household expenditure or income.

1.4.2 Regional and national health frameworks

In 2015, Pacific health ministers reconfirmed their longstanding commitment to the Healthy Islands vision (Box 2).¹⁷ In 2017, they articulated that Healthy Islands must progress towards UHC. The ministers agreed that 'strengthening primary health care and preventive services would be essential to achieving the vision, to progress towards UHC and to attain the health-related SDGs.'¹⁸

At the same meeting, the ministers committed to determining the right services and right service model to achieve UHC by redefining primary health care. This will allow individual Pacific island countries to tailor their approach to achieving UHC over time, taking into account their individual country circumstances, including the need for health promotion and illness prevention activities required to address the growing burden of NCDs. The health ministers also committed 'to ensuring that political leaders and the public understand why and how their own country should improve health services and primary health care' which would require 'mobilizing adequate resources and prioritizing health'.¹⁹

Several recent national health strategies have incorporated UHC as their overarching goal or guiding principle.

Box 2: What are Healthy Islands?

Healthy Islands are where: children are nurtured in body and mind; environments invite learning and leisure; people work and age with dignity; ecological balance is a source of pride; and the ocean which sustains us is protected.

¹⁵ WHO and the World Bank (2017). Tracking Universal Health Coverage: 2017 Global Monitoring Report, p. xii.

¹⁶ ibid.

¹⁷ Eleventh Pacific Health Ministers meeting, 2015 Yanuca Island Declaration on health in Pacific island countries and territories, WHO, Ministry of Health and Medical Services, SPC (The Pacific Community), p. 3. http://www.wpro.who.int/southpacific/pic_meeting/2015/phmmdeclaration2015_english_final_nov3.pdf

¹⁸ WHO (2017). Outcome of the Twelfth Pacific Health Ministers Meeting, Rarotaonga, Cook Islands, 28–30 August 2017, WHO, Ministry of Health Cook Islands, SPC, p. 3. http://www.wpro.who.int/southpacific/pic_meeting/2017/wpr-2018-dps-002-eng.pdf

¹⁹ ibid

1.5 Health system strengthening

Health system strengthening has been a key approach internationally for improving health for more than 20 years. Strengthening health systems, which is separate from discrete efforts to address specific diseases or population groups or provide infrastructure and inputs such as drugs, grew in prominence in the late 1990s. WHO documents from 2000 and 2007 defined a health system and its functions and what constituted efforts to strengthen health systems. The WHO health systems glossary provides a current definition of health systems strengthening (Box 3).20

Box 3: What is a health system?

'A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health.'

WHO classified the basic functions of a health system as:

... provide services; develop health workers and other key resources; mobilize and allocate finances, and ensure health system leadership and governance (also known as stewardship, which is about oversight and guidance of the whole system).

These functions were broken down into six essential building blocks: health service delivery; health workforce; health information systems; access to medical products, vaccines and technology; health systems financing; and leadership and governance.

Everybody's Business: Strengthening Health Systems To Improve Health Outcomes, WHO's Framework for Action, noted it can be difficult to classify activities to a single building block because the challenges '... require a more integrated response that recognizes the interdependence of each part of the health system'.

Health systems strengthening is:

(i) the process of identifying and implementing the changes in policy and practice in a country's health system, so that the country can respond better to its health and health system challenges.

(ii) any array of initiatives and strategies that improves one or more of the functions of the health system and that leads to better health through improvements in access, coverage, quality, or efficiency.

International evidence confirms that the health system strengthening framework continues to endure because it is an effective way to improve health service coverage and quality and results in better health outcomes.²¹ Health system strengthening has also been useful in directing attention to what is required for the sector to improve health.²²

Over the past decade, major disease or service-specific programs have come to recognise that they cannot fully achieve their objectives in the absence of strong health systems. Most have committed to invest part of their financing in, or align their activities with, health system strengthening. The Global Fund to Fight AIDS, Tuberculosis and Malaria, for example, with its long-term goal of ending the epidemics of the three diseases, has a strong commitment to supporting 'resilient and sustainable systems for health'. In a similar way, efforts to improve health security requires strengthening health systems so they can detect and respond to health threats. As one often-quoted definition states: 'Here is a simple guide: health system strengthening is what we do; universal health coverage, health security and resilience are what we want.²³

1.5.1 Health system strengthening in Australian health and development policies and strategies

During the evaluation period (2008–09 to 2017–18), DFAT developed two health development policies and a strategy. Each emphasised the importance of supporting countries to strengthen their national health systems to finance, manage and deliver equitable health services while balancing with other priorities, including more immediate funding of services for specific diseases or population groups and regional health security.

Helping Health Systems Deliver policy

This policy, published in 2006, stated: 'Australia's development assistance in health will need to strike a balance between addressing major and immediate health concerns and managing the longer-term task of strengthening underlying health systems.'

²⁰ WHO (2007). 'Health systems: improving performance', The World Health Report 2000, Geneva https://www.who.int/whr/2000/en/; WHO (2007). Everybody's Business: Strengthening Health Systems To Improve Health Outcomes. WHO's Framework for Action, Geneva. https://www.who.int/healthsystems/strategy/ everybodys_business.pdf; https://www.who.int/healthsystems/hss_glossary/en/index5.html

²¹ L Hatt, B Johns & C Connor, et al. (2015). Impact of Health Systems Strengthening on Health, Bethesda, MD: Health Finance & Governance Project for United States Agency for International Development.

JF Naimoli, S Saxena, LE Hatt, KM Yarrow, TM White & T Ifafore-Calfee (2018). 'Health system strengthening: prospects and threats for its sustainability on the global health policy agenda', Health Policy and Planning, vol. 33, no. 1, pp. 85–98. https://doi.org/10.1093/heapol/czx147

J Kutzin & SP Sparkes (2016). 'Health system strengthening, universal health coverage, health security and resilience' [editorial], Bulletin of the World Health Organization, vol. 94, https://www.who.int/bulletin/volumes/94/1/15-165050.pdf

Saving Lives policy

This health assistance policy, published in 2011, had, as a priority: 'to support partner countries to manage sustainable health systems that deliver equitable, affordable and quality health'.

Health for Development Strategy 2015–2020

This health development strategy, launched in 2015, has, as its first strategic outcome: 'to help build country-level systems and services that are responsive to people's health needs'.

Other themes common across the three documents are:

- » ensuring the importance of equitable services and serving the poor and vulnerable
- » improving service quality
- » paying attention to gender equality
- » addressing threats to health security
- » working in global partnerships to address the region's needs.

1.5.2 Features of health system strengthening

International literature describes features of health systems and how development agencies can strengthen them.

Here are features of health systems and health system strengthening relevant to this evaluation.

A health system is a 'complex adaptive system'24

Every component, team and person functions autonomously but are interdependent. Strengthening one component of a health system may help individuals and teams to do their job more efficiently and effectively, but the prospects and consequences of change will be affected by whether other components facilitate or resist that change.

Health systems, especially in resource-constrained settings, are also affected by external factors such as natural disasters and shifting donor interests. A development assistance program designed to strengthen a health system needs to therefore apply 'systems thinking'.²⁵ A siloed focus on one component, such as health workforce training or procurement, is unlikely to produce a significant change if other parts of the system do not also adapt.

Health system strengthening involves expanding capacity and capabilities

National health systems cannot be reformed from the outside. Pacific people, teams, networks and institutions, such as ministries of health, require skills, confidence, leadership and an enabling environment to improve performance and drive change. ²⁶ Development assistance programs contribute by supporting country-led efforts to build health system capacity through a mix of approaches such as technical advice, leadership development, training and scholarships.

Strengthening health systems is about politics as much as technical solutions

In countries that have experienced greater health gains than countries with similar cultural, historical, economic and social characteristics, technical strategies have usually not been the main drivers of improved performance.^{27,28} Other drivers include:

- » political will
- » commitment to a long-term vision
- » competent and empowered managers at different levels—national, provincial, district or local government, and non-government organisations (NGOs)
- » exploiting opportunities, including changes in political imperatives and shifting priorities of donors
- » devising innovative and country-specific workforce, financing or delivery solutions.

²⁴ T Adam & D de Savigny. 'Systems thinking for strengthening health systems in LMICs: need for a paradigm shift', *Health Policy and Planning*, 27 (suppl 4), iv1-iv3, 2012; J van Olmen, B Marchal, W Van Damme el al., 'Health systems frameworks in their political context: framing divergent agendas', *BMC Public Health*, 2012, vol. 12: 774 [online publication] http://www.biomedicalcentral.com/1471-2458/12/774

²⁵ B Ramalingam. Aid on the Edge of Chaos: Rethinking International Cooperation in a Complex World, Oxford University Press, 2015.

²⁶ MR Reich, AS Yazbeck & P Berman, et al. 'Lessons from 20 years of capacity building for health systems thinking', *Health Systems & Reform*, 2016, vol. 2, no. 3, pp. 213–21.

²⁷ D Balabanova, A Mills & L Conteh, et al. 'Good health at low cost 25 years on: lessons for the future of health system strengthening', *The Lancet*, 2013, vol. 381, pp. 2118–33.

²⁸ F Samuels, AB Amaya & D Balabanova. 'Drivers of health system strengthening: learning from implementation of maternal and child health programmes in Mozambique, Nepal and Rwanda', Health Policy and Planning, 2017, doi: 10.1093/heapol/czx037

For development agencies to make effective contributions to country-led change, they need to understand how people live and what influences their decisions.²⁹ As WHO has noted, health system strengthening 'requires both technical and political knowledge and action'.30

1.6 Health in the Pacific

On a foundation of thousands of years of successful existence, rich cultural and community life, and engagement with external influences, Pacific island countries now face opportunities and threats.

Pacific island countries have substantial natural resources. They are rich in cultural diversity and are rapidly increasing their trade and digital links with global markets. Also, remittances from those who have moved overseas to work are contributing to family and community prosperity. However, Pacific island countries face development challenges. They:

- are physically detached from major markets
- have small populations spread across many islands (except for Nauru)
- are confronting the worst impacts of climate change
- are some of the most vulnerable countries to natural disasters in the world
- can, at times, be prone to political instability within borders
- » have changing geopolitical landscapes.

A snapshot of the population and economy in the seven focus countries is in Box 4.

1.6.1 Trends in Pacific health

According to the Global Burden of Disease Study 2019, between 2005 and 2015, child mortality declined significantly in the Pacific (Figure 2) while increases in life expectancy were modest.

The largest declines in child mortality occurred in the three low-middle social development index (SDI) countries of Kiribati, Solomon Islands and Vanuatu. Child mortality in

these countries in 2015 was below the rates in comparable countries. Samoa and Tonga, both middle SDI countries, had lower child mortality rates in 2005 than the other countries included in the evaluation and, as such, declines were smaller. In 2015, their rates were also lower than in SDI-comparable countries. Fiji was an exception, with very little improvement in child mortality over the decade. In 2015, its rate was nearly double that of comparable high-middle SDI countries.³¹

Unfortunately, gains in child survival in the Pacific have not led to longer, healthier lives. Between 2005 and 2017, according to data from the Global Burden of Disease Study 2019, life expectancy at birth had only increased one or two years in the six Pacific island focus countries, compared to gains of 2.8 to 4.5 years in countries with similar SDI rankings (Figure 3). Nauru's estimated life expectancy of 64.4 years, based on its 2011 census, puts it among the countries with the lowest life expectancy in the region.³²

Box 4: Snapshot of population and economy in the seven focus countries

The seven diverse countries included in this evaluation are home to an estimated 2.26 million people; 1.54 million live in the most populous countries of Fiji and Solomon Islands, and only an estimated 13,000 live in Nauru. Approximately three-quarters of the populations of Samoa, Solomon Islands, Tonga and Vanuatu and half of the populations of Fiji and Kiribati live in rural, and frequently isolated, areas. Nauru, which has a land area of 21 square kilometres is entirely urban.

Women in Samoa and Solomon Islands can expect to have an average of four births over their lifetime and the average of women in Vanuatu and Kiribati is more than 3.5 children. Women in Fiji, Nauru and Tonga have an average of between 2.6 and 3.2 births. High fertility is resulting in high population growth rates of nearly 2.5 per cent annually in Vanuatu and Solomon Islands, but in other countries out migration for education and employment is keeping population growth to under 0.5 per cent.

In 2017 GDP per capita ranged from US\$ 9000 in Nauru to US\$ 1,600 in Kiribati. A table of country indicators is in Annex 1, Table 1.

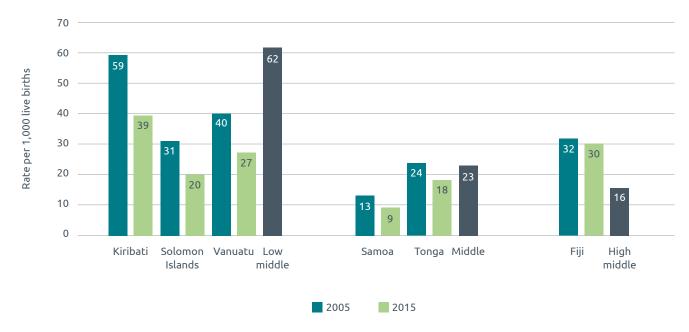
²⁹ D Harris, R Batley & J Wales. 'The Technical is Political: What Does This Mean in the Health Sector?' ODI and University of Brimingham, 2014; Carothers T & de Gramont D, 'The new politics agenda', Development Aid Confronts Politics: The almost revolution (ch. 1), Washington, DC: Carnegie Endowment for International Peace, 2013.

³⁰ WHO (2007). Everybody's Business: Strengthening Health Systems To Improve Health Outcomes, WHO's Framework for Action, Geneva. https://www.who.int/ healthsystems/strategy/everybodys business.pdf

³¹ Note: UNSW, SPC & UQ (2014). Mortality trends in Pacific island states. Trends are broadly consistent with the Global Burden of Disease data described elsewhere but show a continued decrease in under five mortality rates in Fiji. https://prism.spc.int/images/VitalStatistics/The_Pacific_Report_V35_FINAL.pdf

Republic of Nauru, National Report of Population and Housing Census 2011, Count Me In, ANG KADAT MEMAK 30 October, p. 45. www.spc.int/nmdi/nmdi documents/2011_NAURU_CENSUS_REPORT.pdf

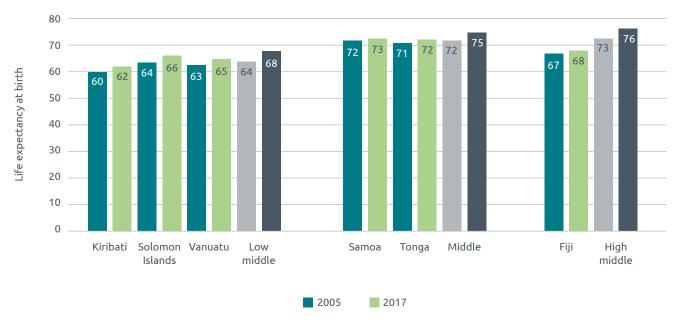
Figure 2: Changes in child mortality (deaths under five years per 1,000 live births) in six Pacific island focus countries, 2005 and 2015, and comparison with similar countries in 2015 (black column)



Notes: IHME Social Development Index (SDI) has been used here to group countries at similar levels. Kiribati, Solomon Islands and Vanuatu are low-middle SDI, Samoa and Tonga are middle SDI, and Fiji is high-middle SDI. IHME data not available for Nauru.

Chart: DFAT. Source: IHME (2019). Global Burden of Disease Study 2019, All-cause Mortality and Life Expectancy 1950–2017. http://ghdx.healthdata.org/gbd-2017 Accessed 12 April 2019.

Figure 3: Life expectancy at birth in six Pacific island focus countries, 2005 and 2017, and comparison with similar SDI countries in 2005 (grey column) and 2017 (black column)



Note: Another study, *Mortality trends in Pacific island states*, suggests that life expectancy for four focus countries (Fiji, Kiribati, Nauru, Tonga) had not even increased and have, in fact, plateaued at relatively low levels of life expectancy, with no sustained improvement over the previous two decades. UNSW, SPC & UQ (2014). *Mortality trends in Pacific island states*. https://prism.spc.int/images/VitalStatistics/The_Pacific_Report_V35_FINAL.pdf

Chart: DFAT. Source: IHME (2019). Global Burden of Disease Study 2019, All-cause Mortality and Life Expectancy 1950–2017. http://ghdx.healthdata.org/gbd-2017 Accessed 12 April 2019.

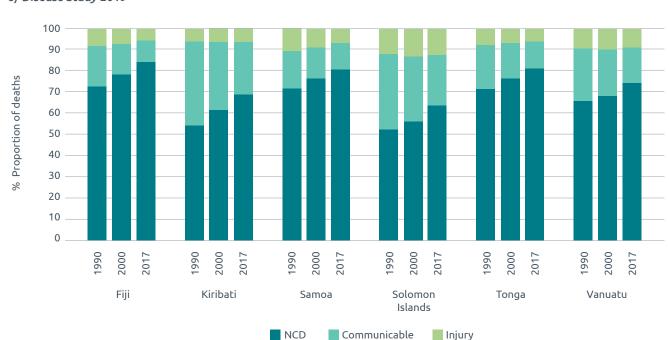


Figure 4: Proportion of deaths by key cause in six Pacific island focus countries for 1990, 2000 and 2017, Global Burden of Disease Study 2019

Note: Data includes all ages and both sexes.

Chart: DFAT. Source: IHME (2019). Global Burden of Disease Study 2019, http://ghdx.healthdata.org/gbd-results-tool/ Accessed March 2019.

The most important cause of persistent high adult mortality has been deaths due to NCDs, such as cancer, diabetes and heart disease, rates of which have been high and are increasing (Figure 4). These diseases cause early deaths among Pacific Islanders, as well as disabilities such as amputations and blindness.

1.6.2 Progress in Pacific health service coverage

Pacific island countries have improved health service coverage for their populations over the past two decades. As Figure 5 shows, coverage increased throughout the evaluation period in the six countries for which data were available (shaded in grey).

Figure 5 shows values for the UHC service coverage index global SDG Indicator 3.8.1 tracking progress towards SDG Target 3.8—derived from country data and modelling.

One indicator tracked by DFAT health programs is the proportion of one-year-olds who received the recommended three doses of a vaccine against diphtheria, pertussis (whooping cough) and tetanus (DPT3). Achieving and maintaining high coverage of DPT3 requires financing, planning, logistics, health record keeping and health workforce development.

As shown across figures 6 and 7, childhood immunisation coverage for DPT3 for six of the focus countries, compared to the average of countries of similar economic development, over the evaluation period was mixed. The three lower middle-income countries of Kiribati, Solomon Islands and Vanuatu compared favourably to the average of lower middle-income countries. While Fiji compared favourable to the average of upper middle-income countries, Samoa and Tonga fell short.

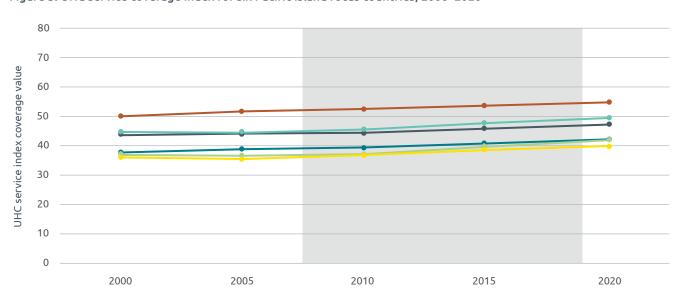


Figure 5: UHC service coverage index for six Pacific island focus countries, 2000–2020

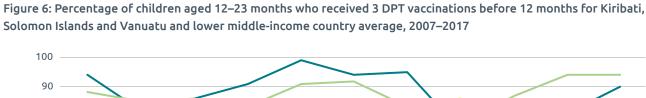
Note: Coverage index for essential health services (based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access). Area shaded in grey is the evaluation period, 2008–2009 to 2017–2018.

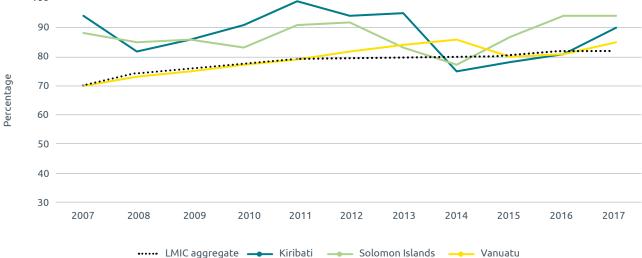
🗕 Samoa 🛶 Solomon Islands 🛶 Tonga 🗕

Chart: DFAT. Source: IHME (2019). *Global Burden of Disease Study 2019*. https://vizhub.healthdata.org/sdg/Accessed 9 April 2019.

Kiribati –

Fiji

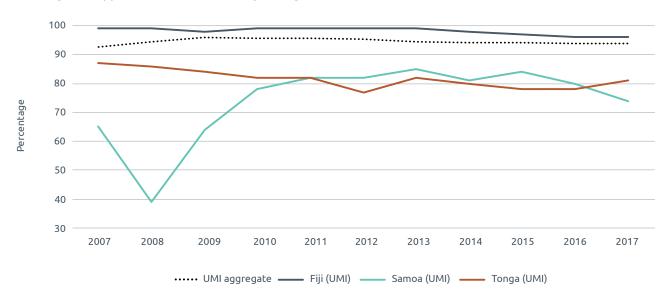




Note: World Bank income classification has been used to group counties into lower middle income and upper middle income.

Chart: DFAT. Source: World Bank (2019). https://data.worldbank.org/indicator/sh.imm.idpt Accessed March 2019.

Figure 7: Percentage of children aged 12–23 months who received 3 DPT vaccinations before 12 months for Fiji, Samoa and Tonga and upper middle-income country average, 2007–2017



Note: World Bank income classification has been used to group counties into lower middle income and upper middle income.

Chart: DFAT. Source: World Bank (2019).

Chapter 2: Evaluation purpose and methods

This evaluation is intended to inform DFAT, Pacific country governments and other stakeholders engaged in health and development in the region.

In DFAT, the evaluation is particularly relevant to the Office of the Pacific, including Pacific posts, and the Health Policy Branch. For Pacific country governments, DFAT hopes that Pacific health ministries, as well as ministries of planning and finance, will find the evaluation useful.

Other development partners and stakeholders who share a common goal of a healthier Pacific should also find the evaluation helpful. DFAT hopes it will contribute to more informed discussion as the basis for construction of stronger health and development partnerships.

This chapter provides an overview of the evaluation questions and scope, its methods and limitations. Annex 2 provides further detail on the methodology.

2.1 Evaluation questions and scope

In broad terms, the evaluation asked what worked to support Pacific island countries to strengthen their health systems and how DFAT can do better.

The evaluation focused on Australia's support, administered by DFAT, to seven focus countries—Fiji, Kiribati, Nauru, Samoa, Solomon Islands, Tonga and Vanuatu. It was structured around these inter-related evaluation questions:

- » What health programs did DFAT fund in the seven Pacific island countries?
- » What were the key characteristics of DFAT's major country health programs for strengthening health systems?
- » Have DFAT's major country health programs contributed to strengthening health systems?
- » Which DFAT ways of working have helped or hindered strengthening health systems?

» How can DFAT enhance the contribution of its health programs in the Pacific islands?

The evaluation excluded health programs in Papua New Guinea (PNG). Its population is four times larger, and its land area more than seven times greater, than the seven focus countries combined. Australian ODA in health to PNG through country programs totalled \$896 million between 2008–09 and 2017–18, more than twice the country health ODA directed to the seven focus countries. The effectiveness of Australian ODA to strengthen PNG's health system is worthy of an evaluation but was beyond the scope of this one.

Australia's crosscutting policies relevant to health development assistance include:

- » mainstreaming gender equality and women's empowerment into health investments
- » ensuring disability inclusion
- strengthening the role of civil society and the private sector in demanding and providing quality health services.

This evaluation did not assess if health investments contributed to progress in these areas. It did, however, briefly explore how well programs had incorporated gender equality and women's empowerment objectives into health programs, drawing largely on:

- » DFAT's internal quality reporting system
- » an internal background paper on integrating gender to improve health outcomes in the Australian aid program.

In addition, ODE had recently published *Development for* All: Evaluation of progress made in strengthening disability inclusion in Australian aid.³³

The evaluation used a framework that grouped health system functions into four categories developed to classify donor investments.³⁴ These were refined and modified to reflect the types of activities DFAT supported and to analyse DFAT investments.

³³ ODE (2018). Development for All: Evaluation of progress made in strengthening disability inclusion in Australian aid, ODE, DFAT, November 2018. https://www.dfat.gov.au/sites/default/files/development-for-all-evaluation.pdf

³⁴ G. Shakarishvili, et al. (2011). 'Health Systems Strengthening: a common classification and framework for investment analysis', *Health Policy and Planning*, 26:316–326.

The four functions and their purposes were:

1. Governance and leadership

Set policies and budgets, review progress based on evidence and address performance, and includes sector-wide human resource planning and management.

2. Financial management

Ensure funds are available and used accountably for payments and procurement of equipment, drugs and other supplies.

3. Health services

Deliver care to patients through appropriate models of primary and hospital care, including essential drugs and medical supplies, clinical guidelines, and a workforce of an appropriate size, mix, skills, and scope of practice.

4. Health information systems

Generate the information that enables the health system to manage day-to-day operations, review and account for progress and inform decision making.

Chee et al. distinguished between strengthening health institutions and interdependence of functions of health systems on the one hand and supporting recurrent or capital operations on the other.³⁵ The evaluation team used this distinction to code DFAT-funded inputs that were supporting recurrent or capital operations as 'supporting activities'. These included:

- building or repairing health facilities
- employing staff³⁶
- buying and installing major equipment
- buying vaccines, drugs, medical supplies and other consumables.

Funds for urgent needs, such as natural disaster responses, were also provided.

2.2 Evaluation methods

The evaluation took a strengths-based approach to data collecting and reporting. This followed guidance from DFAT's Reference Group comprising representatives of:

- Office of the Pacific
- **Development Policy Division**
- Contracting and Aid Management Division
- several Pacific posts
- Office of Development Effectiveness.

The DFAT Reference Group indicated that information about 'what works and examples of positive deviance' was of much greater practical value than a listing of what did not work. This approach also acknowledged the efforts, experiences and knowledge of DFAT and Pacific governments.

Five data sources were analysed to address the evaluation questions. This enabled results to be triangulated across datasets, countries and investments. Table 1 illustrates how each data source and analysis contributed to answering each evaluation question.

The analysis and their data sources are:

1. Portfolio analysis

A database of DFAT health sector development programs and investments active in the seven countries during the evaluation period was analysed to determine levels of expenditure, types of programs (country-level, regional, global and Oceania unspecified) and partners.

2. Desk review

Documentation on the major country health programs was reviewed, providing details on activities supported. This information was used to develop interview guides, select investments and countries to be visited, and design case studies.

Relevant DFAT policies and the findings and recommendations of independent evaluations were also reviewed and synthesised and common themes around factors that helped or hindered investment effectiveness identified.

Desk review findings were documented in working papers and shared with the Reference Group members.

³⁵ G. Chee, et al. (2013). 'Why differentiating between health system support and health system strengthening is needed', International Journal of Health Planning and Management, 28(1): 85-94.

³⁶ Employing staff encompasses in-line positions to cover staff shortages. If the text indicates that a position had a capacity development function, it was coded under the relevant health system function such as health workforce development under Health Services or procurement under Financial Management.

3. Key informant interviews and focus groups

Before the country visits, the evaluation team held semi-structured interviews and small group discussions with DFAT staff experienced in country and regional health programming and with representatives of other development partners (34 participants).

Interviews explored drivers of health investment choices. They also explored the enablers and challenges internal and external to DFAT that influenced the effectiveness of investment designs, implementation and learning.

4. Document analysis of selected (major) programs

Based on the portfolio analysis and desk review, 15 of 63 country-level health programs active in the seven countries during the evaluation period were selected for detailed analysis.

Selection criteria included health system strengthening as an explicit or implicit objective of the program and the availability of one or more independent evaluations or reviews.

Selected programs represented a large proportion of DFAT's total country-level health expenditure in the focus countries.

Investment documents and expanded notes from interviews were imported into NVivo 12, used to manage, code and conduct the analysis.

More detail on coding and analysis for each evaluation question is in Annex 2.

Table 1: Data sources and their contribution to addressing the key evaluation questions

	What did DFAT fund, and what were its characteristics?	Did it contribute effectively?	What DFAT ways of working helped or hindered?	How can DFAT enhance its contribution?
Portfolio analysis of DFAT database of health programs active during the period	✓	✓	✓	1
Desk review of major country health programs and policies	1	1	1	1
Key informant interviews and focus groups	1	✓	/	1
Document analysis of the 15 major health investments across three health system functions	✓	✓	✓	1
Country visits—case studies on health systems strengthening in Fiji, Solomon Islands and Tonga focused on:				
 health information systems health workforce development pharmaceutical and supply chain management. 	✓	✓	✓	/

5. Case studies of health system strengthening

The evaluation team visited Fiji, Solomon Islands and Tonga for six to eight working days each. This was to gain firsthand understanding of the context-specific influences on how national health system improvements occur and how DFAT's contribution facilitates or inhibits change. These three countries represent a range of program approaches, specifically a:

- program managed by a contractor in Fiji
- large sector budget support program in Solomon Islands
- smaller program of assistance through the Ministry of Health (MoH) in Tonga.

The countries differ in levels of per capita income, health spending and health system performance, making it possible to learn about health system strengthening and how DFAT contributes in a range of settings.

During the country visits, the evaluation team held interviews and small group discussions with 154 people, including:

- government officers, particularly from health ministries and including frontline health workers and managers
- staff at DFAT posts
- development partners.

The team visited some health facilities and, where possible, located and interviewed people who had been involved in DFAT-funded health programs.

The interviews and facility visits were organised around these three health system functions, identified from the document analysis as a focus in most selected country health programs:

- 1. health information systems
- 2. health workforce development
- 3. pharmaceutical supply chain management.

The team sought information about major changes in the three functions in the last decade and:

- their interaction with other parts of the health system
- how Australian support contributed to this
- what aspects of DFAT engagement and support worked well
- what DFAT should do to make the best possible contribution.

Team members synthesised their interview notes using an agreed sub-set of evaluation questions related to effectiveness and DFAT ways of working. They did so based on the key themes identified in the evaluation's first stage. Debriefings were held with posts at the end of each country visit. The team then consolidated findings during a two-day analysis workshop.

Findings drew on the combined evidence from all available data sources. Although more information was available for the three countries visited, the document analysis enabled issues for the other four countries to be investigated. Triangulation revealed a substantial level of agreement between data sources.

In addition to triangulation, the synthesis process drew on other standards of evidence for qualitative studies:

- chronology of inputs and outcomes
- absence of positive change when support was not provided or provided in a different way
- frequency of claims made by different informants and documents
- plausibility of these claims to stakeholders inside and outside of DFAT.

The team was sensitive to the different perspectives and world views of those interviewed and their diverse experiences. Having a Pacific health expert on the team meant Pacific knowledge and experience could be incorporated.

Finally, draft findings and recommendations were further validated with senior officials of six of the focus countries.

2.3 Limitations of the evaluation

The evaluation was not able to attribute evidence of stronger health systems entirely to DFAT's support, recognising that many other factors contributed to progress, especially the efforts of Pacific islands governments and people themselves. However, the evaluation did assess if DFAT's programs made a positive contribution.

All evaluations face methodological limitations and this evaluation was no exception.

Every program activity occurred in a specific time and place and was influenced by Australia's wider aid and foreign relations policies and the context in Pacific island countries. What worked in one place and time would not necessarily be feasible or effective in another place or time. This constrained the ability to generalise findings. Drawing on the experiences of multiple country programs over 10 years mitigated this limitation.

The evaluation was unable to analyse how much DFAT spent on specific aspects of health systems through selected programs, due to the lack of detailed expenditure data in an easy-to-analyse format. Instead, the evaluation used document analysis to describe what activities were supported.

There was a widespread lack of outcome data related to DFAT-supported activities and the evaluation was not designed to collect independent information to test claims. There is therefore a risk of positive bias due to the evaluation's reliance on mostly DFAT documentation. This was especially the case with the use of DFAT's internal quality reporting system reports:

- » Aid quality checks (AQC) (formerly called Quality at implementation (QAI) reports)
- » Final aid quality checks (FAQC).

This risk was mitigated by reviewing independent evaluations conducted on the country programs, and through frank face-to-face discussions. These discussions were preceded by informed consent and a guarantee of anonymity, so key informants could speak openly of their experience and knowledge of DFAT programs and performance.

Chapter 3: What did DFAT fund?

Australia is one of several development partners working in the seven Pacific focus countries, along with multilateral organisations and others. Australia is the largest of the donors, followed by Japan and New Zealand.

According to IHME data, Australia was the source of 54 per cent of all ODA for health between 2008 and 2016 for the six focus countries for which data were available (Figure 8). Its contribution ranged from 68 per cent of health ODA in Solomon Islands, to 39 per cent in Tonga (where Japan contributed a similar amount). For Nauru, information

was not available from IHME data. Using the Lowy Institute Pacific Aid Map, it was estimated that Australia provided more than 70 per cent of the ODA, including for health, spent in Nauru between 2011 and 2017.37,38

This chapter provides an overview of funding for DFAT's health programs in the seven countries over the evaluation period, and the key characteristics of the 15 major country health programs. It draws out implications for the effectiveness of health system strengthening activities and DFAT's ways of working.

Figure 8: Proportion of development assistance for health to six Pacific island focus countries by source of funds, 2008 to 2016

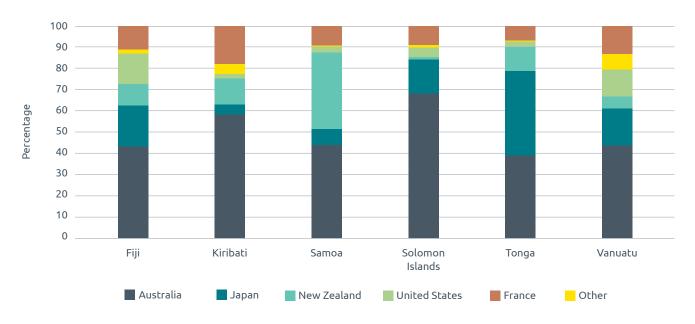


Chart: DFAT. Source: IHME (2019). Development Assistance for Health Database 1990–2017. Seattle, United States. http://ghdx.healthdata.org/record/ihmedata/development-assistance-health-database-1990-2017 Accessed 9 April 2019.

³⁷ https://pacificaidmap.lowyinstitute.org

A review of DFAT's support to the Nauru health sector through the Improved Health Program, December 2017, indicated Australia contributed some 80 per cent of external cash grant contributions to the health sector between 2014 and 2018. (2017) Review of DFAT's Improved Health program Nauru, Specialist Health Service.

3.1 Overview of DFAT's funding for health in the Pacific, excluding PNG, 2008–09 to 2017–18

Finding

DFAT continuously supported health development in the seven focus countries. Some changes in the amount and type of funding were made, reflecting changing Australian Government development policy.³⁹

3.1.1 Types of funding

Assistance came through four types of funding: country, regional, global and Oceania unspecified programs (Table 2). More detail is in Annex 1, Table 2.

Table 2: Australian ODA for health, administered by DFAT, for the seven countries in the evaluation period

Type of funding	Australian ODA, 2008–09 to 2017–18, millions
Country	\$402
Regional	\$71
Global	\$40
Oceania unspecified	\$176
Total	\$689

DFAT source.

Country programs (\$402 million)

These programs were planned and overseen by DFAT posts in partnership with partner governments. They were part of the country funding envelope, with the amount of funding directed to health determined through bilateral negotiations.

Regional programs (\$71 million)

These programs were designed and managed through DFAT Canberra or Suva Post and directly benefited the focus countries. In each financial year of the evaluation period, there were up to seven regional programs.

In recent years, the two largest regional programs were the Pacific Sports Partnerships Phase 2 (2015–17) and the Pacific Regional Health Strategy Program (2014–15 to present). The Pacific Sports Partnership is a competitive grant program that aims to use sport to develop healthier and more inclusive communities in the Pacific. The Pacific Regional Health Strategy is an extensive program comprising activities to strengthen regional health governance and support health service delivery in NCDs, health security, clinical services and sexual and reproductive health.

Global programs (\$40 million)

These programs were primarily activities of Australian NGOs through the Australian NGO Cooperation Program, the Australian Volunteers Program and their predecessors. They directly benefited the focus countries.

Oceania unspecified programs—regional (\$157 million) and global (\$19 million)

These programs had a Pacific-wide rather than specific-country focus. They encompassed a broad range of programs and activities. The top three categories of expenditure according to DAC codes were:

- » health policy and administrative management
- » STD control, including HIV and AIDs
- » infectious disease control.

Next were medical education/training, medical services and research on malaria and tuberculosis (TB) control.

Multilateral organisations spent half (50 per cent) of these funds, and another 27 per cent was spent by universities and research institutions.

³⁹ The Australian Government's decision to cap ODA expenditure and integrate AusAID into DFAT.

3.1.2 Changes in total expenditure and composition

Trends in total annual expenditure for health programs reflected changes in the broader Australian policy environment.

As Figure 9 shows, the evaluation period started when Australian ODA was being increased (it peaked in 2012–13). The following year, the Government capped ODA expenditure and integrated AusAID into DFAT. This resulted in annual expenditure stabilising just below pre-2012–13 levels for all but one year.

While the Pacific was largely protected from funding cuts to the overall ODA budget, both DFAT staff and development partners commented on the negative impact of DFAT budget changes or uncertainty relating to them. Negative impacts included not being able to provide ongoing support to some programs and positions, and on the perceived sustainability of investments. The budget changes also generated extra work for DFAT posts and Pacific island health ministries.

The composition of the type of funding changed over the evaluation period, as illustrated in Figure 10.

Figure 9: Australian health ODA designated to seven Pacific island focus countries and Oceania unspecified, 2008–09 to 2017-18

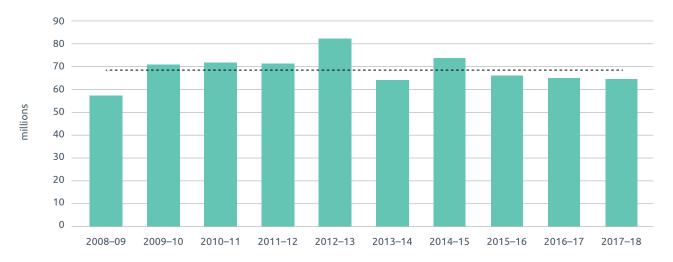
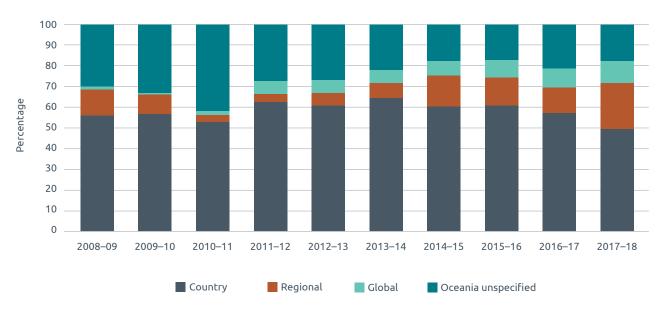


Chart: Dotted line shows trend in funding levels. Source: DFAT.

Figure 10: Change in composition of type of funding, 2008–09 to 2017–18



Source: DFAT.

Country programs started and ended the evaluation period with the same annual expenditure (\$32 million). As a proportion of the total health portfolio the evaluation considered, the share for country programs declined, reaching a low of 49 per cent of total expenditure in 2017–18.40,41

In contrast, regional programs that benefited individual countries started the evaluation period in 2008–09 with an annual expenditure of \$7 million and ended it with \$14 million, an increase from 12 per cent to 22 per cent of all types of funding (sometimes referred to as multi-country programs).

The proportion of health spending allocated to specific focus countries through global programs also increased in the second half of the evaluation period.

Expenditure on regional and global programs which had a broader focus on, for example, regional policy development, training and research, and infectious disease control declined during the evaluation period.

3.2 Support at country level

Finding

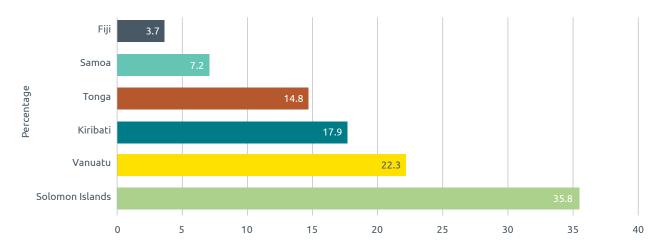
Australian ODA made a significant financial contribution to the health systems of all seven countries.

DFAT had a large number of programs in each country which, at times, led to a complex set of programs for countries and DFAT posts to deal with.⁴²

3.2.1 Australian support for health per country

According to IHME, Australian ODA for health ranged from more than one-third of total health expenditure from government and development assistance for health sources in Solomon Islands, to less than four per cent in Fiji from 2007 to 2016 (Figure 11).

Figure 11: Estimate of Australian ODA for health as a percentage of Pacific island countries' total health expenditure from government and external sources, 2007 to 2016



Australian ODA for health as percentage of countries' health expenditure (government plus external development assistance for health)

Notes: For this analysis, estimates for 2007 to 2014 were combined with forecasts for 2015 and 2016. Australian ODA through all channels (for example, country programs, regional and global) is calculated as a percentage of countries' government spending on health plus all external development assistance for health. Private out-of-pocket spending and prepaid health care (insurance) are not included. Nauru is excluded, as it is from most international data sets, due to its small population.

Chart: DFAT. Source: IHME (2019). Global Burden of Disease Collaborative Network. *Global Expected Health Spending 2015–2040*. Seattle, United States. http://ghdx.healthdata.org/record/ihme-data/global-expected-health-spending-2015-2040 Accessed April 2019.

⁴⁰ Note: Portfolio includes Australian ODA for health for the seven countries in the evaluation period totalling \$689 million. The assistance came through four types of funding: country, regional, global and Oceania-unspecified programs. It excludes expenditure directly benefiting PNG (country, regional and global).

⁴¹ Note: Repeating the same calculation with PNG (country, regional and global expenditure) included shows that the direction of change in the composition of programs is the same, although the absolute figures and percentages are different (for example, country programs comprised 78% in 2008–09, 84% in 2013–14 and 76% in 2012–18).

⁴² Complex is defined as the state of having many different parts connected or related to each other in a complicated way. https://www.collinsdictionary.com/dictionary/english/complexity

DFAT's contribution per capita to the seven countries equalled an average of \$24 in 2017–18. It was lower in Fiji, Kiribati and Samoa, and higher in Nauru and Tonga. Clearly DFAT contributed a significant proportion of funding to these health systems and changes in funding would be expected to have an impact. In Fiji, where DFAT's relative contribution was small, funding was welcomed as it provided flexibility to trial new ways to strengthen health systems when domestic funding was largely tied up in meeting ongoing costs.

3.2.2 Health expenditure and composition, excluding Oceania unspecified expenditure

Over the past decade, Solomon Islands received the most Australian ODA for health (Figure 12) out of the total allocation to the seven focus counties—41 per cent, excluding expenditure on Oceania unspecified. Fiji and Vanuatu were the next largest recipients with a combined 34 per cent. Nearly three-quarters of the allocated health ODA for the seven countries went to these three countries. Funding from global programs was almost exclusively spent in Fiji, Tonga and Vanuatu, while regional programs expenditure was distributed more evenly.

The relative amounts of ODA funding for health to each country have remained approximately the same over the decade, although the actual absolute amounts and composition of funding per country varied year-on-year.

3.2.3 Complex set of health programs

For this evaluation, complex is defined as consisting of many different and connected parts.

DFAT's Pacific health programs for the seven focus countries (excluding Oceania unspecified) comprised:

- 63 country-level programs
- 24 regional programs
- 22 global programs (Annex 1, Table 3).

Fiji, Solomon Islands and Vanuatu had at least 45 programs active in their countries at different times over the decade of the evaluation; even Nauru had 17.

While a large number of programs does not necessarily equate to complexity, at least two separate analyses over the evaluation period described the mix of DFAT programs at country level, making the point that it created a complex web. Key informants also talked of lack of coordination of DFAT programs in country.

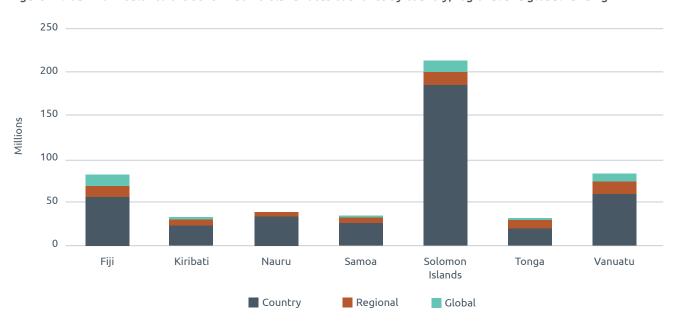


Figure 12: ODA for health to the seven Pacific island focus countries by country, regional and global funding

Note: Total Australian ODA expenditure for health, administered by DFAT, on country, regional and global programs (excluding Oceania unspecified) for 2008-09 to 2017-18.

Source: DFAT.

The 2015 portfolio review for Vanuatu⁴³ counted 12 bilateral budgets and 15 Pacific regional programs, scholarships and NGO grants. Multilateral work going to the Vanuatu health sector was through more than 30 financing channels (this has since been redesigned). The evaluation team was aware of a similar exercise for Solomon Islands in 2011 which came up with 52 health mechanisms, many of which were Australian-funded.

3.3 What were the key characteristics of DFAT's major country health programs for strengthening health systems?

Finding

The majority of DFAT's country program funding was purposefully channelled through 15 major health programs with broad remits and five-year life cycles, often repeated, to contribute more effectively to a broad range of health system strengthening activities.

Larger programs in Solomon Islands and Vanuatu provided a higher level of support to a range of activities across all functions, while other country programs, especially the smaller ones, were more selective.

In Kiribati and Tonga, funding support for health services, and 'other supporting activities', made up most budgets.

All countries required some critical inputs to service delivery, (health facilities, staff, equipment and consumables) over the evaluation period.

3.3.1 Selected major programs, modalities including technical assistance and partner

The 15 major country health programs that were the focus of this evaluation constituted \$326 million or 81 per cent of all DFAT country program health expenditure (Annex 1, Table 5). They represented:

- » 89 per cent or more of DFAT's country health expenditure in Fiji, Samoa, Solomon Islands and Tonga
- » 65 and 67 per cent respectively in Nauru and Vanuatu
- » 19 per cent in Kiribati⁴⁴ (the Kiribati Health Program is smaller in funding and scope than the other selected investments).

All programs included an objective to strengthen the health system. ⁴⁵ They also addressed a range of health issues and topics. DFAT referred to many of these as 'umbrella' programs because of their breadth.

The selected programs together covered the entire evaluation period for each country, and in most countries operated as two or three sequential programs. The selected programs for the seven countries, by duration and total spend over the evaluation period, are in Table 3.

⁴³ C Waddington & J Eldon (2015). Australian Health Portfolio Review, Vanuatu, Health Resource Facility. https://www.dfat.gov.au/sites/default/files/australian-health-portfolio-review-vanuatu.pdf

⁴⁴ Note: Large country program investments not included were an infrastructure program in Nauru, separate programs for malaria, medical workforce, village health workers and a local NGO in Vanuatu and a scholarship program for i-Kiribati to obtain Bachelor of Nursing degrees at an Australian university to facilitate skilled migration.

⁴⁵ Note: According to their objectives, all investments included a focus on health systems strengthening. For about one-quarter, health systems strengthening was the predominate focus. For about half, health systems strengthening had equal weighting with a disease/population focus. With the final quarter, a disease/population focus was dominate.

Table 3: Selected major country health programs for seven Pacific island countries, by duration and total spend, 2008-09 to 2017-18

	2008-09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18	Total funding*	
	Fiji Healt Improvei (FHSIP)	h Sector ment Prog	ram								9,550,502	
Fiji			Fiji Healt Sector In Assistand	terim							3,300,859	
				Fiji Healt	iji Health Sector Support Program (FHSSP)							
Kiribati				Kiribati I	Health Pro	gram					4,395,229	
Nauru	Nauru He Sector Pi										2,359,195	
		Nauru Im	proved He	ealth							20,262,923	
	Samoa H	ealth Sect	or Initiativ	'e							18,405,665	
Samoa			Partners Developi Health	hips for ment—Im _l	proved						1,000,000	
						Samoa H	ealth Prog)ram			4,769,639	
		Islands Ho —Phase 1	ealth Secto (HSSP1)	or Support							56,132,938	
Solomon				Solomon Islands Health Sector Support Program—Phase 2 (HSSP2)							75 541 046	
Islands									Health So Support Program		75,541,046	
									3 (HSSP3		35,722,694	
Tonga		Tonga He	ealth Syste	ems Suppo	rt Progran	rt	10,076,421					
34								8,063,942				
Vanuatu			Vanuatu	Health Se	ctor Suppo	ort 2010–1	9				39,873,795	

Most major programs expended funds through a combination of modalities:

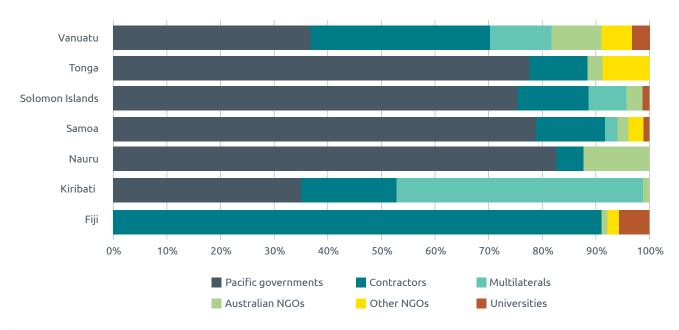
- » Budget support, or a variation of budget support, providing funding direct to Pacific governments, was used in most countries.
- » Project/program funding to a commercial contractor was the main modality used in Fiji's programs, but was also by other major country programs for various purposes, including technical assistance. Not surprisingly, contractors were the second most common partner in most countries (Figure 13).
- » Funding to multilateral development organisations for programs, projects and technical assistance was common across all programs, although relatively small. Multilateral development organisations represented about 9 per cent of total funding, with WHO the major recipient.

The number of partners ranged from only two (other than government) for the Nauru Health Sector Program to 42 for the Vanuatu Health Program (Annex 1, Table 6).

The evaluation found it challenging to quantify expenditure on technical assistance, but it was estimated that 20 to 25 per cent of funds were expended on this in the later part of the evaluation period.⁴⁶ Several interviewees expressed the view that using technical advisers reduced over the evaluation period.

Details on long-term international technical advisers in selected health programs are in Annex 1, Table 7.

Figure 13: Percentage of funding flows by partner type, by country, for the 15 selected country-level health programs



Source: DFAT.

⁴⁶ Note: AusAID, Australian Aid to Health Service Delivery in Papua New Guinea, Solomon Islands and Vanuatu, Evaluation report, June 2009. This evaluation estimated that technical assistance, including training, research and analysis and advisory support, accounted for nearly 50 per cent of support (p. 5). DFAT health expenditure data did not provide the amount of funding for technical advisers but it may have been the major part of the funding to contractors, multilaterals and NGOs, which amounted to 40 per cent across all countries (or 30 per cent excluding Fiji). Some of those funds also covered operational costs, procurement and construction. In the documents reviewed by the evaluation team, technical adviser costs were quoted to be about 20 per cent of the total investment budget (17.4% in Nauru in 2015–16, 17.5% budgeted for the Vanuatu Health Program and 26% to 28% for Solomon Islands' HSSP3).

3.3.2 Health system strengthening activities

The broad range of health system activities DFAT supported in the 15 selected programs for the evaluation period are in Table 4.

Table 4: Health system strengthening activities supported by the selected investments in seven Pacific island countries, 2008–09 to 2017–18

Health system strengthening activities supported through the selected investments	iĒ	Kiribati	Nauru	Samoa	Solomon Islands	Tonga	Vanuatu
Governance							
Planning and budgeting							
Policy making, strategy and review							
Human resource management							
Governance processes							
Leadership development activities							
Financial management							
Management of financial systems							
Financial accountability							
Payment							
Pooling of funds							
Human resource development for finance							
Procurement							
Health services							
Community engagement							
Community health workers							
Drugs and technology supply chain management							
Health workforce development							
Quality and coverage of health services							
Health information							
Health information systems and patient record systems							
Surveillance systems and surveys							
Human resource development for M&E and health information systems							

Programs in all countries supported strengthening governance, although leadership development activities were not mentioned in documentation for several countries and may have received limited attention.

All countries supported strengthening health services, including improving their quality and coverage, pharmaceutical supply chain management and developing the workforce.

The development of community health workers as a cadre was supported in Fiji and Vanuatu.

Financial management was not supported in every country, in part because responsibility for public financial management rests with finance ministries, frequently supported by other parts of Australia's aid program.⁴⁷

All countries supported strengthening health information systems to some degree, although human resource development for M&E was not mentioned in documentation for several countries and may have received limited attention.

Larger programs, in Solomon Islands and Vanuatu, provided a higher level of support to a range of activities across all functions, while other country programs, especially the smaller ones, were more selective. In Kiribati and Tonga, funding support for health services, and 'other supporting activities', made up most of the budgets. It is not clear what drove this choice.

3.3.3 Other supporting activities

The selected country programs also funded inputs to support service delivery, including:

- » building or repairing health facilities
- » employing staff⁴⁸
- » buying and installing major equipment.
- » buying vaccines, drugs, medical supplies and other consumables (Table 5).

Table 5: Other supporting activities funded through the selected investments

Other supporting activities	æ	Kiribati	Nauru	Samoa	Solomon Islands	Tonga	Vanuatu
Facility construction, rehabilitation and maintenance							
Employment of international in-line staff and visiting medical specialists (where capacity development is not undertaken)							
Purchase of equipment and software							
Purchase of drugs and consumables							

⁴⁷ Support for countries' planning and budgeting processes is assigned to the governance function.

⁴⁸ If the text indicates that a position had a capacity development function, it was coded under the relevant health system function, such as health workforce development under Health Services or procurement under Financial Management.

Chapter 4: Has DFAT assistance contributed to strengthening health systems?

This chapter assesses, in several ways, if DFAT-funded programs made a positive contribution to Pacific governments' efforts to improve health system performance. It also briefly explores how well these health programs have incorporated gender equality and women's empowerment objectives.

The assessments of effectiveness included:

- Analysing trends in the 'effectiveness scores' for 14 of the 15 selected country investments using DFAT's internal quality reporting system (AQCs (formerly called QAIs) and FAQCs).
- Identifying positive assessments, and specific examples, of the effectiveness of the selected investments on health systems strengthening based on an analysis of documentation in DFAT's internal quality reporting systems, and DFAT-commissioned independent evaluations and reviews).
- Examining the association between DFAT's support of country efforts to strengthen health systems, particularly the health workforce, health information systems, and pharmaceutical distribution and supply chain management, drawing on the case studies in Fiji, Solomon Islands and Tonga.
 - In addition to DFAT documentation, the case study analysis draws on the experience of Pacific government officials and clinical staff, other development partners and publicly available reports by Pacific governments and technical agencies. The full case studies are in Annex 3.
- Examining changes in health systems in two other areas identified in country visits, but for which comprehensive case studies were not developed planning, budgeting and financial management in Kiribati, Solomon Islands and Vanuatu, and health services reform in Solomon Islands.

4.1 Effectiveness of investments based on DFAT's internal assessments

Major findings

Overall, DFAT's contribution included improved performance in country health systems in: governance and leadership; health financing and public financial management; health information systems; and health services.

DFAT support also contributed to strengthening the capacity of individuals and institutions, especially through support to health workforce training institutions and scholarships. Improved coordination and planning between the scholarship program and human resource priorities of health ministries will further maximise the value of scholarships in addressing gaps in the health workforce.

4.1.1 Effectiveness scores in DFAT's internal quality reporting system for 14 of the 15 selected investments

Finding

Most programs, for five of the seven countries, scored an average of satisfactory or higher on effectiveness across the evaluation period, according to DFAT's internal quality reporting system.

DFAT's internal quality reporting system monitors programs through annual AQCs (formerly QAIs). FAQCs are conducted at completion of programs to internally assess performance throughout implementation including assessing program outcomes where possible.

Table 6: AQC (formerly QAI) and FAQC effectiveness scores for selected country health investments, 2008 to 2018

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	FHSIP	3	4	3	5							
Fiji	FHS Interim Assistance					4	5					
	FHSSP					4	5	4	5	4	4*	
Kiribati	Kiribati Health							5	5	3	4	4*
	NHSP	4	3									
Nauru	Improved Health			4	4	5	4	3	3	3	2	3*
C	Samoa Health Program									4	4	4
Samoa	Health Sector Initiative		5	4	3	3	4	3	3	3	3*	
	HSSP1		4	3	4	4						
Solomon Islands	HSSP2						4	4	5	4*		
	HSSP3										4	4
T	THSSP1				3	4	5	5	5	5*		
Tonga	THSSP2									5	4	4
Vanuatu	Vanuatu Health Program				4	4	4	4	4	4	3	4

 $[\]hbox{*FAQC scores, which measure effectiveness over the investment period.}\\$

Note: The Partnerships for Development—Improved Health (Samoa) investment was valued less than \$3 million so did not require internal quality reporting.

These reports for country programs are compiled and peer reviewed by DFAT officers, and a subset of all reports independently quality assured annually to assess the robustness of scores (adjusted where required). AQC and FAQC assessments draw on post's knowledge and discussions with Pacific governments and implementers, program activity reports, and independent reports and evaluations.

In response to the question 'Are we achieving the results that we expected at this point?', AQC and FAQC effectiveness scores ranged from 1 to 6, with scores of 4 and above considered satisfactory. Table 6 shows the annual effectiveness scores available for the selected health investments. The scores refer to overall investment-specific objectives, not health system strengthening components.

These internal assessments show that in most Pacific island countries, and over most years, selected health investments were rated as satisfactorily effective across the evaluation period. Exceptions were for the major investments in Nauru (Improved Health Initiative) and Samoa (Health Sector Initiative), which scored unsatisfactory effectiveness ratings in half or more of the years of assessment. In Samoa, the assessment of the Health Sector Initiative acknowledged progress in policy development, health workforce training and procurement systems but noted slow completion of infrastructure projects. In Nauru, reasons given for the low scores included technical advisers not being in place and significant underspending. It was also noted that Fiji was given less than effective ratings early in the evaluation period, but these improved over time.

Table 7: Summary of improved performance of Pacific health systems associated with activities supported through selected programs

Health system function	Documented improved performance in areas supported by DFAT
Governance and leadership	Planning and budgeting improved, especially where authority was decentralised (Fiji, Solomon Islands, Vanuatu).
	Workforce planning and management improved (Fiji, Samoa, Solomon Islands, Tonga).
	Policies developed to aid in achieving UHC and addressing upstream determinants of NCDs, such as tobacco control (Samoa, Solomon Islands and Tonga).
	Donor coordination improved (Kiribati, Samoa, Solomon Islands).
Health financing and public financial	Government financing for health and particularly for primary health care increased or was maintained (Samoa, Solomon Islands, Tonga, Vanuatu).
management	Pacific governments absorbed recurrent costs previously funded through DFAT support (Fiji, Solomon Islands, Tonga, Vanuatu).
	Improvements in procurement processes for health modestly improved (Samoa).
	Recurrent budget absorption rates improved (Solomon Islands).
Health information systems	Quality of public health data recording and reporting improved. (Fiji, Kiribati, Solomon Islands, Vanuatu).
	Electronic patient record systems being used (Fiji, Solomon Islands).
	Use of data for planning and decision making increased (Fiji, Solomon Islands, Vanuatu).
Health services	For most countries health workers per population increased, related to localised pre-service training solutions (Fiji, Samoa, Solomon Islands, Tonga, Vanuatu).
	NCD prevention and control integrated into primary care (Fiji, Samoa, Solomon Islands, Tonga).
	Immunisation coverage increased (Fiji, Samoa, Solomon Islands).
	Maternal and child health care strengthened (Fiji, Samoa, Solomon Islands).
	Malaria control integrated into mainstream services. (Solomon Islands).
	Management of the pharmaceutical supply chain improved (Solomon Islands).

In the case of four investments, FAQCs were completed and programs scored on effectiveness. Results were broadly consistent with annual assessments.

Finding

Further analysis of DFAT documentation (internal quality reporting system and independent evaluation reports and reviews) provided positive assessments, and specific examples, of the effectiveness of the selected investments on health systems strengthening.

Table 7 provides examples of reported improvements across four health system functions in the areas associated with DFAT support, as reported in DFAT documents.

DFAT's contributions to improvements in some areas are further described in this chapter, based mostly on the case studies in three countries.

4.2 Effectiveness of DFAT's contributions for specific health system components

4.2.1 Pacific health workforce

Findings

DFAT's contribution to the development of the Pacific health workforce through a combination of support over the past decade, was effective. DFAT has opportunities to further support Pacific island countries' workforces to meet the changing needs of its people, including by increasing focus on health promotion and illness prevention.

DFAT support was associated with increased numbers, qualification and management of the Pacific health workforce. DFAT's investment in Pacific health workforce training institutions made the biggest contributions to health workforce development in Pacific island countries.

DFAT support to local training institutions through infrastructure, curricula development, faculty support and financing enabled increases in trainee numbers and quality of training.

Australian-funded scholarships contributed to health workforce development in the Pacific, however there is still room for improved coordination and planning between the scholarship program and human resource priorities of respective health ministries to maximise the value of scholarships in addressing gaps in the health workforce.

An effective health workforce should be appropriate to a country's service delivery model, population size, geography and disease burden. It requires:

- » adequate numbers of health workers with appropriate qualifications and skills to safely deliver essential health services
- » a comprehensive health workforce planning and management system.

4.2.1.1 Adequate numbers of health workers

Over the evaluation period, all three case study countries increased the number of doctors, nurses and midwives per 1,000 population.

Solomon Islands

According to the World Bank's recent assessment, Solomon Islands has made great strides in increasing the size and skill mix of its workforce. The ratio of doctors and nurses per 1,000 population rose from 1.9 in 2012 to 2.2 in 2016, due to a near doubling of the number of doctors and a 25 per cent increase in nurses.⁴⁹ This ratio is just below the WHO threshold for reaching basic maternal care (2.3) but still well below WHO's suggested threshold of 4.45 for delivering essential services.⁵⁰

While Solomon Islands has increased numbers in its workforce, challenges remain as the World Bank assessment explained: 'Although the numbers of health workers per capita has improved in recent years, the skill mix and distribution of health workers across provinces, disease burden, and national programs is generally inequitable and supply-driven.'

Fiji

According to the MoHM 2008 and 2016 annual reports, Fiji has increased the number of filled medical and nursing posts, which has, in turn, increased its health worker-to-1,000 population ratio from 2.5 to 3.9. This puts Fiji within reach of the new minimum health worker density ratio set by WHO of 4.45 skilled workers to 1,000 population, to obtain coverage of essential services outlined in the SDGs.⁵¹

Tonga

The number of health workers has achieved steady growth in Tonga. According to MoH 2008 and 2016 annual reports, Tonga's ratio of health worker to 1000 population has increased from 4.0 to 4.8, slightly above the WHO threshold of 4.45. The country has also introduced a cadre of NCD nurses. The evaluation team heard that while the NCD nurses were providing prevention and treatment services, (for example, wound care), they were finding it difficult to undertaken as much prevention as they would have liked. A closer look at the skill mix required for health promotion and primary prevention would therefore seem valuable.

⁴⁹ World Bank (2018). Spend Better: Solomon Islands Health Financing Assessment, Washington DC, 2018.

⁵⁰ In 2006, WHO identified a minimum health worker density of 2.3 skilled health workers (physicians, nurses and midwives) per 1,000 population as necessary to attain high coverage of skilled birth attendance as a surrogate for basic needs. In 2016, WHO published a new threshold of 4.45 skilled health workers per 1,000 population to obtain coverage of essential services as outlined in the SDGs. This number is to be considered indicative and is not appropriate for subnational population or microstates. WHO, Health Workforce Requirements for Universal Health Coverage and the Sustainable Development Goals, 2016, Geneva. https://apps.who.int/iris/bitstream/handle/10665/250330/9789241511407-;jsessionid=1B2B5CC47701B6A70C044A59BB9E0238?sequence=1

⁵¹ DFAT understands that this figure has subsequently been increased. It has been reported (verbally) that the number of doctors is now up to 800, surpassing WHO's minimum standard of 1 doctor to 1,000 people.

4.2.1.2 Comprehensive health workforce planning and management system

Evidence from the evaluation's document review, and confirmed through some interviews, highlighted DFAT's contribution to workforce planning and management.

Fiii

Workforce planning and management at central level has improved in Fiji, and the role of community health workers (a point of contact between communities and the health care system) has been revitalised and formalised, particularly in remote areas. The country's Ministry of Health and Medical Services (MHMS) strengthened its support for a network of 1,500 community health workers by providing a small monthly salary, which recognises their role and supports sustainability.

Solomon Islands

Provincial health authorities now have greater authority over workforce matters, including how staff are supervised. The country is looking to strengthen control over the distribution of its workforce.⁵² Medical graduates returning from Cuba are being upskilled and supported to achieve local registration and practice clinical medicine through the Solomon Islands Graduate Support and Supervision Program.⁵³

Tonga

The number of doctors with specialist training in Tonga increased six-fold between 2005 and 2015 and a pipeline of future medical specialists was established under THSSP2, including in areas such as surgery, internal medicine, ophthalmology, paediatrics and emergency medicine.⁵⁴

Tonga is also considering new service delivery models for primary care, such as integrating NCD services and introducing general practitioners. Further, the country has restructured its corporate services and introduced new job descriptions.

DFAT's contribution to stronger health workforces

It is likely that DFAT support contributed to the stronger health workforces in each country through a wide variety of inputs (all or some). Examples include:

- targeted technical advice on workforce planning and management, particularly in Fiji and Solomon Islands
- support for in-service training for cadres, such as Fiji's community health workers and Tonga's NCD nurses
- support to improve capacity in specific clinical services in Fiji and Solomon Islands
- financial and technical support to upgrade nursing school curricula and facilities, as well as medical training, in Solomon Islands
- scholarships and filling in-line clinical specialist positions in Tonga.

4.2.2 Scholarships

Between 2008 and 2017, 310 scholarships were awarded for Pacific people from the seven focus countries to undertake undergraduate and postgraduate study in health-related fields. Two-thirds of health scholarships were to study at Pacific institutions (Annex 1, Table 10). Most funding came through the Australia Awards program, which is not part of the ODA for health summarised in Chapter 3.

The evaluation found evidence that the scholarship program has benefited Pacific health systems and services, largely through clinical and allied health training. Most scholarships were for degrees from Pacific institutions in clinical medicine (90) and allied health (84), thus contributing to updating and improving the standards of care appropriate to their country's context. A more limited number of scholarships relating to health administration were also awarded.

During country visits, the evaluation team met with numerous former scholars, including a number now playing crucial roles in the health system, and some engaged in DFAT-supported activities. The fact that scholars were in important roles was consistent with the findings of the Australian Awards Global Tracer Facility Case Study in Solomon Islands—health field (covering scholars who completed their awards between 2007 and 2010). The case study found that alumni had become leaders in the Solomon Islands health sector in the decade or so since returning from their award. In their own way, each alumni has offered

⁵² DFAT Quality Reporting System.

⁵³ Australian Volunteers International (2018). External Review of the Solomon Islands Graduate Support and Supervision Program, 2018.

⁵⁴ DFAT (2017). Review of the Critical Staff Deficiencies Component of the Tonga Health Systems Support Program—Phase 2, Specialist Health Service. Internal DFAT document.

guidance, structure and vision to the development in their niche areas of health.⁵⁵

However, this evaluation was unable to obtain overall data on the:

- » retention (return or employment rate) of scholarship recipients in local health sectors
- » extent to which scholarships are strategically allocated to support broader health systems development.

Scholarships, through building the local workforce, can contribute to sustainability; however, to measure their impact, data needs to be collected on employment rates of scholarship recipients in country-of-origin health sectors.

An issue raised about scholarships by both partner government representatives and DFAT staff during the field visits was the need for better coordination and planning between the scholarship program and human resource priorities of the respective health ministries to ensure gaps in the health workforce are better addressed by scholarships.

Support for Pacific training institutions

DFAT support for Pacific health worker training institutions has contributed to enabling more and better-quality training, leading to a more highly qualified health workforce in both clinical and corporate services.

DFAT's bilateral, and in some cases regional, investments supported these Pacific training institutions:

- » Fiji National University—School of Medicine, Nursing and Health Sciences
- » Solomon Islands National University—School of Nursing and Allied Health Sciences
- » Samoa School of Nursing
- » Kiribati School of Nursing
- » Vanuatu College of Nursing Education
- » Tonga—Queen Salote Institute of Nursing and Allied Health.

Nursing education in Kiribati, Samoa, Solomon Islands, Tonga, and Vanuatu has been strengthened with assistance from DFAT bilateral funding. Independent evaluations of the selected country health programs were consistently positive about the effectiveness of support, usually provided through a combination of:

- » improved facilities
- » equipment
- » technical advice for curriculum development (often through twinning with an Australian nursing school)
- » scholarships.

Strengthening local training institutions also has the potential to contribute to sustainability of DFAT investments in Pacific health sectors.

DFAT has supported different models of in-country intern and registrar training in Kiribati, Solomon Islands and Vanuatu to ensure returning medical graduates have appropriate skills and are registered and practicing medicine within the local health sectors. DFAT-funded programs have been evaluated positively through independent evaluations and other program documents. 56,57,58,59

Outcomes include:

- » Kiribati—15 of the original cohort of 18 graduates from Cuba and Fiji National University completed internships, registered and are working as registrars or general medical officers.
- » Solomon Islands, through the Solomon Islands Graduate Internship and Supervision Support Project, December 2015 to 2017—26 out of 90 interns and bridging program graduates from Cuba, Fiji and Taiwan were deployed in country. Another 20 to 25 are graduating each year. This is helping address the acute shortage of doctors across Solomon Islands.
- » Vanuatu—now has 12 qualified specialists, after many years of intensive scholarship and specialist clinical support from Australia.

⁵⁵ DFAT (2018). Australia Awards Global Tracer Facility, Case Study in Solomon Islands—Health Field, 2018, DFAT, Canberra. Section 4.3.1. https://dfat.gov.au/people-to-people/australia-awards/Pages/australia-awards-global-tracer-facility-solomon-islands-alumni-case-study.aspx

⁵⁶ Australian Volunteers International (2018). Solomon Islands Graduate Internship Supervision and Support Program—Phase 1 Report December 2015 to December 2017. Internal DFAT document.

⁵⁷ DFAT Quality Reporting System.

⁵⁸ C Waddington & J Eldon (2015). Australian Health Portfolio Review, Vanuatu. Health Resource Facility. https://www.dfat.gov.au/sites/default/files/australian-health-portfolio-review-vanuatu.pdf

⁵⁹ DFAT, Final Aide Memoir Joint Health Mission Kiribati, 2017. Internal DFAT document.

Under the Pacific Regional Program, DFAT has also supported the Fiji National University to be a main regional provider of courses in medicine, nursing and allied health professions.

4.2.3 Health information systems

Finding

DFAT support contributed to significant improvements in health information systems in Fiji and Solomon Islands through a combination of support sustained over an extended period.

Parallel support for planning and budgeting helped to drive the demand for better health information. DFAT provided limited support to Tonga for health information system strengthening over the evaluation period.60

Health information systems underpin health planning, management and policymaking. Indicators of stronger systems include improved recording and reporting and use of data for management and decision making. The case studies in three countries—Fiji, Solomon Islands and Tonga—noted progress in collecting, reporting and using health information, including hospital patient records, and health information from community facilities.

Fiji and Solomon Islands strengthened their health information systems between 2008 and 2017 aided by technological advances and health reforms that required data for sub-national planning and budgeting. Both countries are implementing electronic patient record systems.

During the decade under review, DFAT maintained or increased its support to health information systems in these countries in various ways, including:

- funding infrastructure
- buying or customising software
- funding in-service and higher degree training
- providing technical advisers
- meeting operational expenses, where required, to incentivise reporting and data use.

In parallel, DFAT support for provincial budgeting and planning, in response to Solomon Islands' decentralisation policy, helped to create a positive feedback loop with increased demand for better information stimulating the need for improved health information systems.

In Fiji, DFAT funded additional health information officers to support the health information unit's greater involvement in decentralised planning and budgeting.

In Tonga, the health information systems are still not fully fit for routine reporting. The quality of reporting and data use appeared to have improved but it declined over the evaluation period because of workforce issues and the failure of systems to keep up with changes in service delivery. DFAT support in this area was limited to a few activities such as funding scholarships and providing volunteers. An early effort to support new technology for patient records was not successful, but a more recent pilot to introduce and adapt a mobile platform for capturing and analysing data from community-based facilities was demonstrating potential to improve reporting.

4.2.4 Planning, budgeting and financial management

Finding

DFAT's support contributed to strengthening health sector planning, budgeting and financial management in Kiribati, Solomon Islands and Vanuatu.

Planning, budgeting and financial management in the health sector underpins effective and efficient health care delivery. Over the evaluation period, Kiribati, Solomon Islands and Vanuatu all strengthened the financial management of their health systems to varying degrees. This included by:

- increasing or maintaining government financing for health, particularly for primary health care
- increasing absorption of recurrent health expenditure
- improving annual operational planning and budgeting
- improving financial reporting.

⁶⁰ In recent years, the Asian Development Bank has undertaken to fund a new hospital and patient health information system in Tonga.

Highlights related to increasing or maintaining Government financing for health included:

Kiribati—public expenditure on health increased from \$24 million in 2014 to \$31.5 million in 2016, while the domestic share of expenditure increased from 77 per cent to 82 per cent.

Solomon Islands—budget allocations to provincial health authorities responsible for core health service delivery in areas where most of the population live were largely protected from the decreasing DFAT development budget. Between 2015 and 2017, DFAT's contribution to the MHMS recurrent budget decreased by SI\$47 million but the total provincial grants decreased by only SI\$4 million.

Vanuatu—The government increased the total Ministry of Health (MoH) budget allocation from VT1.73 billion in 2015 to VT1.99 billion in 2017 and the budget allocation for community health services from VT297.5 million in 2015 to VT314.2 million in 2017.61

Another significant improvement in Solomon Islands, assisted by DFAT-funded technical assistance, was the increase from 40 per cent to 100 per cent between 2014 and 2017 for the proportion of MHMS divisions submitting annual operational plans and budgets, including provincial ones. Over the evaluation period, the MHMS increased ownership of the annual operational plans and budgets process.⁶²

It is likely that DFAT support contributed to these improvements. DFAT's country programs supported relevant short and long-term technical advisors, PLF in Solomon Islands and policy dialogue. A regional DFAT-funded program implemented by the World Bank's Pacific Islands Health Sector Program of Advisory Services and Analytics (PASA) provided advisory and analytic assistance. PASA included country specific work in Solomon Islands and Vanuatu from 2013 and in Kiribati since mid-2015, as well as activities at regional level.⁶³

An independent review of PASA (2015–17) concluded that:

... this small program has contributed at both country and regional levels to strengthened systems for health financing, particularly through improving public financial management, efficiency of resource use and quality of expenditure, and this broad focus remains relevant.⁶⁴

The review attributed improvements, in part, to identifying issues and sharing good practices with relevant ministries to help address the issues. It also provided significant analytical and technical support to strengthen planning and budgeting, and the links between them.

The PASA review showed that the program helped ministries of health to improve efficiency by:

- » directing resource allocation towards priorities within realistic assessments of financing available
- » reducing waste through efficiency studies
- » promoting better coordination among partners to reduce duplication and gaps and enable a smooth transition between funding sources
- » identifying the most cost-effective approaches for responding to NCDs.⁶⁵

The review also identified some outstanding public financial management bottlenecks, which required ongoing external assistance to address.

4.2.5 Pharmaceutical distribution and supply chain management

Finding

Improvements in the pharmaceutical supply chain management in Solomon Islands demonstrated the positive contribution that can be made through a combination of DFAT support. However, it also demonstrated how quickly circumstances can change and wins undermined.

The degree of effectiveness of investments in this area in Fiji and Tonga was less clear.

Strengthening supply chains requires engagement with many other parts of the health system. 66 This evaluation addressed the pharmaceutical supply chain component, mostly through the three country case studies. It focused on distribution of pharmaceuticals from central medical stores to health facilities. Availability, or avoiding stock-outs, of critical medicines at point of use are indicators frequently used to assess the performance of supply chains.

⁶¹ World Bank (2017). Multi-Year Review of the Pacific Islands Health Sector Program of Advisory Services and Analytics (PI53778): Review Report 2015–2017 Final, December 2017. Internal World Bank document.

⁶² ibid.

⁶³ PASA is jointly funded under the Pacific Facility Trust Fund (Pacific Regional Program) and a World Bank multi-donor trust fund for assisting countries in East Asia and the Pacific to prepare for reductions in external funding for health programs (Global Program).

⁶⁴ op. cit.

⁶⁵ op. cit.

⁶⁶ Y Prashant (2015). 'Health product supply chains in developing countries: diagnosis of the root causes of underperformance and an agenda for reform', Health Systems & Reform, 2015,1:2, 142–154, DOI: 10.4161/23288604.2014.968005

Solomon Islands

DFAT provided significant levels of support to Solomon Islands to improve pharmaceutical supply chain management, including:

- providing technical advisers and volunteers
- supporting the development of an electronic logistics management system
- funding construction of warehouses
- procuring essential drugs.

Overall, Solomon Islands made significant progress in distributing supplies from central to provincial warehouses and then to health facilities using the logistics management system. However, in 2017, stock-outs at national level caused problems throughout the supply chain and a drop in drug availability at primary care facilities (Table 8). The evaluation team was told that this continued throughout 2018. Changes in MHMS drug procurement policy, coinciding with cessation of technical adviser support, contributed to disruptions in supply and distribution.

Tonga

The availability of NCD drugs increased and Tonga maintained good availability of other essential drugs using a largely paper-based system. DFAT support purchased essential NCD drugs early in the evaluation period, which informants and independent evaluations both credited as contributing to improvements in supply chain management. DFAT also supported construction of a medical warehouse, efforts to revitalise an underused logistics management system and technical advisers to produce analytical reports on drug costs, procurement and distribution. It is not clear to what extent these inputs improved supply chain management overall.

Fiji

There were only incremental improvements in the pharmaceutical supply chain over the evaluation period, with the health system still suffering from regular stockouts of essential medicines at hospitals and health centres. While DFAT provided some support for higher education (for example, scholarships and development of pharmacy courses), and placement of volunteers in pharmacy roles and analytical work, there was limited support for the logistics management system.

Table 8: Solomon Islands—availability of critical and essential medicines

	2010	2011	2012	2013	2014	2015	2016	2017
National medical store (31 Dec)		88%	82%	94%	98%	98%	98%	90%
Primary health care facilities	53%	57%	64%	65%	73%	74%	82%	72%

Source: Statistical Health Core Indicator Report, Solomon Islands, MHMS, 2017.

4.2.6 Health services reform

Finding

DFAT contributed to the development of the Role Delineation Policy for Solomon Islands, which has the potential to help guide the country's health system towards UHC.

Good service delivery is a vital element of any health system. Although the precise organisation and content of services will differ between countries, indicators of good service delivery include:

- » comprehensiveness of services
- » accessibility
- » coverage
- » continuity
- » quality.

During the evaluation period, Solomon Islands developed a policy to improve health service provision. It aligned with the government's decentralisation agenda, its national health strategic plan and goal of achieving UHC. The fundamentals of the Role Delineation Policy are that it:

- » defines the different levels of service in the health system
- » was developed based on the principles of primary health care
- » acts as a catalyst for health sector reform to strengthen quality service delivery
- » lays the service delivery foundations for future development of the health system
- » provides guidance on service delivery packages to be provided at each of the six levels of service to inform service planning and improve service quality
- » defines referral pathways.⁶⁷

The policy was endorsed by the Solomon Islands Parliament in May 2018 and is widely known within the MHMS. During the evaluation team's country visit, all interviewees, without exception, mentioned the policy.

Implementing the policy in the coming years is likely to benefit from DFAT's investment over the last decade in the foundational systems needed to transfer responsibility for allocating resources and accountability for results to provincial health authorities. The policy also provides the potential for reforming health services, moving towards UHC and envisaging a service delivery model with varying levels of services which account for the health needs, accessibility and existing community structure of Solomon Islands.

DFAT contributed to the Role Delineation Policy throughout the 10 years of its development, while respecting the lead role of the Solomon Islands Government. The government directly employed the consultant who assisted with the initial drafting, while DFAT provided indirect technical support through WHO advisers, direct support through funded technical advisers within MHMS, and support to relevant research. When the development of the Role Delineation Policy was advanced, its finalisation and endorsement was included as an indicator in DFAT's PLF, and subsequently rewarded with additional funds.

4.2.7 Critical supplies and services—short-term support

All selected country health programs operate in the context of a scarcity of resources relative to need. All responded at some point to requests to fund essential inputs. In Nauru and Solomon Islands, for example, DFAT funds were used over the evaluation period to buy vaccines, drugs, medical supplies and other consumables as well as other recurrent items that could not be met through government revenue alone.

Other DFAT investments were strategically targeted to provide the foundations for a larger initiative to strengthen some aspect of the health system. This including support for new or refurbished buildings, the purchase of drugs and diagnostic tests and key pieces of software (for example, for the health information system strengthening activities in Fiji). To lift the level of NCD care in Tonga, in addition to support for training of nurses, DFAT supported the purchase of essential NCD drugs early in the evaluation period.

⁶⁷ Solomon Islands Ministry of Health and Medical Services (2018). Role Delineation Policy for Solomon Islands.

Other initiatives addressed the lack of staff in critical positions by filling in-line positions—capacity supplementation. These additional human resources have enabled health ministries to implement new practices without waiting until they could create and fill new positions themselves. In Nauru, DFAT assistance paid and recruited for the Secretary of Health position when no national candidate was available for the position. In Vanuatu, DFAT has supported expatriate doctors in the hospital while Ni-Vanuatu students gained their qualifications. Overall this has increased the Ni-Vanuatu specialist workforce and created a pipeline of specialists in training.

4.3 Incorporating gender equality and women's empowerment objectives into health

Finding

DFAT's internal quality reporting system indicated that the selected health programs had a mixed report card with satisfactorily incorporating gender equality and women's empowerment objectives over the evaluation period. Of particular concern were declines in the performance of several programs in more recent years.

Overall trends in DFAT's internal assessment of how well selected country programs incorporated gender inequality and women's empowerment were somewhat difficult to interpret. To some extent results mirror the overall assessment of overall country programs, with Nauru and Samoa receiving unsatisfactory ratings in more years than the other countries. However, Vanuatu also received the same number of unsatisfactory ratings as Samoa across the evaluation period. In addition, however, Kiribati in 2017 and 2018 (FAQC) and Tonga in 2018, were assessed as performing less than satisfactorily (Table 9).

While the evaluation did not specifically focus on gender equality, the documentation review identified that DFAT's important practice of conducting health-specific gender analysis to identify priorities and entry points is relatively recent. Through most of the evaluation period, mainstreaming gender issues in country health programs was limited to:

- supporting reproductive health activities
- supporting sex-disaggregated indicators in M&E frameworks
- counting the number of women participating in courses
- supporting, in some cases, health ministries' gender training, policies and guidelines.

There was little or no reference to reviewing how program activities might be affected by, or could contribute to, transforming gender norms, attitudes and behaviour to improve gender equality and women's empowerment.68

Gender-based violence, a major issue in many Pacific island countries affecting women's health and wellbeing and opportunities for empowerment, was addressed in Nauru, Solomon Islands and Tonga investments.

Nauru—a technical adviser supported improvements in the quality of counselling, policies and guidelines.

Solomon Islands—DFAT supported (through WHO) the development of clinical guidelines for providing health services to survivors of violence and aligned one PLF indicator with the objective in the National Health Strategic Plan to train 600 workers in using these guidelines by 2020.

DFAT also worked cross sectors to support linking the MHMS into the SAFENET referral network (comprising government and NGOs working to improve quality services for survivors of sexual and gender-based violence) with the ministries of justice, police and women, to ensure that health services were well integrated in the packages of support provided to survivors of violence. The effectiveness of this has not yet been assessed.

Tonga—the new Package of Essential Health Services includes gender-based violence services, and these were reviewed in a 2017 audit of facilities.

More detail on how the Australian aid program addresses gender-based violence is in ODE's 2019 evaluation Ending Violence Against Women and Girls: Evaluating a decade of Australia's development assistance.⁶⁹

⁶⁸ DFAT (2017). Integrating gender to improve health outcomes in Australia's aid program: a background paper. Specialist Health Service. Internal

ODE (2019). Ending Violence Against Women and Girls: Evaluating a decade of Australia's development assistance. https://www.dfat.gov.au/aid/how-wemeasure-performance/ode/strategic-evaluations/Pages/evawg.aspx

Table 9: AQC (formerly QAI) and FAQC* scores for gender, country programs in seven Pacific island countries, 2010 to 2018 (scores of 4 and above indicate satisfactory performance)

		2010**	2011	2012	2013	2014	2015	2016	2017	2018
	FHSIP	4	4							
Fiji	FHS Interim Assistance			4	5					
	FHSSP			4	5	4	4	3	4*	
Kiribati	Kiribati Health					4	4	5	3	3*
	NHSP									
Nauru	Improved Health	3	3	5	4	3	4	4	3	4*
Samaa	Samoa Health Program							4	4	4
Samoa	Health Sector Initiative	3	4	4	4	3	4	4	3*	
	HSSP1	2	3	4						
Solomon Islands	HSSP2				4	4	4	4		
	HSSP3								4	4
T	THSSP1		4	3	4	4	4	5		
Tonga	THSSP2							4	4	3
Vanuatu	Health Sector Support		4	4	4	4	4	3	2	3

^{*}FAQC scores, which measure gender equality over the investment period.

Source: DFAT information system.

^{**}Gender equality ratings for QAIs were not consistently applied before 2010.

Chapter 5: DFAT's ways of working

This chapter draws lessons on DFAT's ways of working with Pacific island countries to support stronger health systems.

The emphasis is on the country programs, but the chapter considers other DFAT-funded programs where relevant.

This chapter is organised around these seven inter-related themes:

- DFAT's health and development policies/strategies
- partnerships and relationships
- country program funding modalities
- approaches to supporting capacity development
- coherence within DFAT's health portfolio
- M&E
- DFAT's capacity.

Broadly speaking, the evaluation found good practice under each area, as well as practices requiring improvement.

5.1 DFAT's health and development policies/strategies

Major finding

DFAT's international health and development policies and strategies set the broad framework for its support for strengthening Pacific island health systems. Performance improved across focus countries in each of the health system functions. Opportunities exist to better align DFAT's future policies and strategies with the health priorities of the seven countries, especially with growing support for UHC and to apply the lessons learned in this evaluation.

A focus on UHC, however, will require greater understanding of the extent of inequity in accessing services and the factors exacerbating or impacting access in Pacific island countries. It will also at times require supporting critical inputs to service delivery (health facilities, staff, equipment and consumables).

5.1.1 DFAT's health and development policies and strategies alignment with Pacific island country policies

A strategic objective of DFAT's three health and development policies and strategies covering the evaluation period has been to support countries to strengthen their health systems. However, only the 2011 policy made specific mention of Pacific island countries other than PNG.

In Pacific island countries where there is limited critical mass of human and financial resources for health, Australia will play a major long-term role in funding health services, focusing on the health MDGs (maternal and child health and high-burden infectious diseases), prevention and control of non-communicable diseases and the development of a sustainable health financing system and health workforce. Australia will support partner governments to strengthen the health systems fundamentals that are essential to improve health outcomes.70

The Pacific health ministers affirmed their commitment to Healthy Islands and progress towards UHC (SDG Indicator 3.8). This presents an opportunity for Australia to align explicitly with Pacific country priorities, including with UHC, and health systems strengthening as the way to achieve this. The SDG's focus on leaving no-one behind also reflects DFAT's relevant crosscutting policies on gender and disadvantaged groups.

A focus on leaving no-one behind, will, however, require increased understanding of the extent of inequity in accessing services and the factors exacerbating or impacting access in Pacific island countries.

According to WHO, within the publicly financed health systems of Pacific island countries, there is generally no deliberate segmentation of populations for payment or delivery. There is evidence of inequity in delivering services to the poorest quintiles, especially in Fiji and Vanuatu. While out-of-pocket spending on health in Pacific island countries is low, transport costs can be a deterrent to people seeking care. Also, private and public expenditure on specialised tertiary care inside and outside national borders is increasing.71 This all presents challenges for Pacific island countries in achieving UHC.

⁷⁰ AusAID (2011). Saving Lives policy, p. 8.

⁷¹ https://iris.wpro.who.int/bitstream/handle/10665.1/14040/UHC-SDG-country-profiles-2018-eng.pdf

Chapter 4 identified that over the evaluation period all DFAT selected country health programs responded at some point to requests to fund essential inputs to country health services. This was because the services:

- » could not be met through government revenue alone
- were strategically targeted to provide the foundations for a larger initiative to strengthen some aspect of the health system
- » needed to supplement existing capacity for at least a time

Senior Pacific health leaders, during consultation and while validating the evaluation's draft findings, built on this point, emphasising that in some cases UHC will require supporting activities, including basic inputs such as building or refurbishing health facilities. As the leaders explained, in rural or isolated small islands, for example, the facility is the focus for delivery. Without the facility, it can be very difficult to deliver services.

The impact of climate change on infrastructure was another area of concern. It is reasonable to assume that a focus on UHC will at times require supporting critical inputs to health systems (health facilities, staff, equipment and consumables).

5.1.2 Adopting a health systems'strengthening approach

Finding

DFAT has made a positive contribution to a health systems approach in Pacific island countries. There continues to be some confusion over how to interpret effective health systems strengthening and missed opportunities to share lessons learned on what it looks like in the Pacific.

Notwithstanding the positive examples over the evaluation period outlined in chapters 3 and 4, DFAT support to the health sector has not consistently adopted a health system strengthening approach. DFAT's support to United Nations agencies, for example, at times did not include a health systems component. Another reason for this inconsistency relates to the difficulty in communicating what health system strengthening means.

Interpretations of health system strengthening:

Health system strengthening is an overall approach that focuses on the inter-dependence of different system elements. Working on one element in isolation is unlikely to result in sustained improvements in performance.

An example from a Tonga HSSP2 AQC for 2016 illustrates the value of health system strengthening as an overarching approach; in this case in responding to NCDs.

... a national health system does not operate as a series of discrete disease-specific packages: rather it consists of a number of health facilities and programs which rely on systems to provide them with the appropriate human resources, drugs and equipment, information etc. To improve the quality and sustainability of the NCD response in Tonga it is not enough to support just the narrow technical aspects ... A sustained, efficient response to NCDs requires well-functioning systems of planning, resource allocation, asset management and procurement.

This evaluation found in some cases that a focus on corporate functions was essential for strengthening the health system. This included functions such as:

- » planning and budgeting
- » financial management
- » human resources' management
- » structuring the central health authority.

While these functions are important, however, they are unlikely, on their own, to result in improved use of health services and better health outcomes. This is because the systems require, for example:

- » better service models
- health care provider capacity development
- » consumables in health facilities
- » improved quality of care.

The current and somewhat siloed approach to health system strengthening was reflected in the objectives of some selected country health programs. This approach was, for instance, a standalone objective in the selected Fiji, Nauru, Tonga and Vanuatu country programs rather than a unifying approach. Nauru's Improved Health Program's objectives, for example, included a stand-alone objective of 'improving the quality of health information available'.

On the positive side, this evaluation also found that DFAT increasingly recognised the need to work between ministries and other parts of government to ensure that finance and workforce matters, in particular, are addressed systemically.

5.2 Partnerships and relationships

Major finding

Partnerships between Australia and Pacific island countries, formal and informal, are critical to DFAT's contribution to strengthening health systems. Strategic engagement and policy dialogue around shared objectives, with the right level of representation from both sides and with evidence-informing discussions, contributed to stronger partnerships. It also created a supportive environment in which improvements in health systems were achieved.

Where this was absent, partner countries perceived a lack of respect and mutual distrust, which inhibited frank discussion between individuals on an equal standing. Lack of flexibility and adaptability in how DFAT supported countries to strengthen health systems constrained what partnerships achieved.

Critical to all DFAT's practice in country was the quality of partnerships between Australia and Pacific island countries. Overall, informants in countries spoke of a positive relationship with Australia and recognised the long period of support Australia has provided to health in their countries. Informants in Fiji and Solomon Islands spoke warmly of how Australia stayed engaged, and was flexible in how it supported countries, including in difficult times of civil and political unrest. The evaluation team also heard of good informal relations between senior government officials and senior DFAT staff at post and being able to reach out to try to resolve issues at hand while demonstrating mutual respect and trust.

Even in this positive light, however, there is considerable room for improvement. As one senior partner government official said: 'Like any other relationship—we went through tough times, sometimes we don't really understand each other.'

5.2.1 Strategic engagement and policy dialogue

Despite recognising the long-standing positive collaboration, relationships between DFAT posts and health ministries, and between individuals, were often perceived as 'transactional', and falling short of a true partnership. One of the most common concerns around strategic engagement between DFAT and partner countries was that discussions focused on operational issues rather than on strategy or 'meaningful policy dialogue'.

Strong partnerships and policy dialogue can work to create a supportive environment in which improvements in complex health systems can be achieved. Examples of successful policy dialogue are outlined in Box 5.

From DFAT's perspective, inadequate policy dialogue was a consequence of failed joint governance and review structures. This was mentioned in documents reviewed, which pointed to this occurring in country programs in all seven countries at some stage during the evaluation period. Reasons given were:

- absence of senior government officials due to vacancies or frequent travel
- lack of senior representation and/or technical expertise from DFAT
- lack of in-country presence of other donors.

Partner countries expressed their perceptions in more subtle ways, pointing to lack of respect and mutual distrust, which inhibited frank discussion between individuals on an equal standing. Better understanding of the economic, social and political context within which DFAT operates will help support partnerships and policy dialogue in health.

Box 5: Successful policy dialogue

Successful policy dialogue around health financing was mentioned most frequently in evaluation interviews and documents.

While support for changes in health financing had many elements, one appearing in almost all agreements between Australia and partner governments was an agreed target for partner government funding for health. Discussions of health financing were included in annual meetings between senior officials from finance and line ministries and Australian heads of mission. This was sometimes backed by technical support, especially open discussion around allocative efficiency supported by the DFAT-funded World Bank PASA program. Most focus countries maintained or increased government financing for health, particularly primary health care. Other examples of successful policy dialogue included:

Solomon Islands

DFAT progressed policy dialogue in key areas, working in close collaboration with SWAp partners such as WHO and the World Bank. Key areas included increasing the amount of donor funding which was on-plan, on-budget, and on-system, as well as donor coordination.

For the MHMS 2017 budget, SI\$130 million of donor funding was on-system, compared to SI\$20 million in the 2016 budget. Also, and for the first time, funds spend by 21 development partners (SI\$53 million) were recorded in the government's 476 non-appropriated budget, which is helping MHMS improve oversight and management of all resources in the health sector.

The Pacific's NCD crisis

Policy dialogue was also important in getting buy in from Pacific island leaders who have declared that the Pacific is facing an NCD 'crisis'. Tobacco use is one of the key preventable drivers of NCDs. Policies that reduce tobacco use through raising taxes on tobacco are one of the best buys any country can make. The Pacific Health Ministers adopted a Tobacco Free Pacific by 2025 target and the NCD Roadmap, a key recommendation of which is to raise and then maintain excise duties on tobacco at 70 per cent of manufactured price.

According to a key informant in Fiji, DFAT also influenced policy dialogue to raise the profile of NCDs through tobacco taxation in Fiji. These successful examples often included Australia providing preliminary financial or technical support for accelerating an initiative and then providing more support when Pacific governments took action to reinforce new practices.

5.2.2 Working flexibly and adaptively

DFAT's flexibility—especially its willingness to divert program funds to support government responses to emergency situations such as disease outbreaks and natural disasters—was greatly appreciated by partner governments. Stakeholders expressed concern, however, that DFAT was, at times, less flexible and adaptable to changing country circumstances when it came to supporting countries to strengthen their health systems.

Box 6 includes examples of DFAT's flexibility in supporting countries' efforts in health systems strengthening.

Box 6: Working flexibly and adaptably

Solomon Islands—Australia contributed to the development of the Role Delineation Policy in Solomon Islands throughout the 10 years of its development, while respecting the partner government's lead role. DFAT demonstrated significant flexibility in how it supported the plan's development, was willing to support from behind and willing to adjust work plans to assist with completion.

Fiji—Australian support has contributed to transforming the patient health record systems, including funding the latest and most successful move to the web-based PATISPlus and tablet-based Public Health Information System. This was after an earlier attempt where a lack of telecommunications infrastructure limited the success. One informant said, 'Australia was willing to take the risk on investing in technology at a time Fiji was not in a position to do so.'

In 2018, at the time of the evaluation team's visit, PATISPlus was operating relatively well as a complete in-patient system, integrating all facilities and laboratory results, although it was not issue free. DFAT post recently heard about current issues with limited storage capacity of PATISPlus, illustrating the ongoing and changing needs of health information systems.

Reasons given for perceived lack of DFAT flexibility included the lack of genuinely shared understanding and commitment to country priorities. To inform its program designs, DFAT consistently used national plans as one indication of what partner governments wanted to achieve in health systems support. Although national plans are a good starting point, the evaluation found that they may not reflect current partner government health system strengthening priorities. Reasons for this include:

- evolution over time of the aims expressed in the national plans or preferred approach to achieving them
- lack of real ownership of plans developed without adequate engagement with relevant government officials.

Another reason seemed to be lack of recognition that policy dialogue involves sharing and learning about each other's views, policy options and constraints. It also involves discussing strategies to overcome barriers to achieve common goals. In contrast, one view raised in interviews with DFAT officials, and reflected in documents, is that policy dialogue involved DFAT aiming to influence Pacific governments to change their policies and practices to align with DFAT's view of what was 'correct'.

On a more positive note, the evaluation found that DFAT had started to recognise and incorporate an understanding of current political and institutional context into its more recent health designs. Working iteratively and adaptively over the life of a program is also important to allow changes in the face of lessons learned and shifting contexts.

5.3 Country program funding—types of aid

Major finding

DFAT predominately channelled its health funding through government systems. Working within partner systems has many advantages, including opportunities to strengthen them. However, it also has challenges. Necessary risk management requirements, for example, can impose high transaction costs that can reduce efficiency and effectiveness.

PLF in Solomon's Islands provided useful lessons for when and how to use this modality.

With a decade of experience, the evaluation concluded it is timely for DFAT and Pacific island countries to jointly explore opportunities and challenges of funding through government systems, and the lessons from performance-linked funding.

In six of the seven focus countries the investments selected for this evaluation were channelled through government financial systems. Due to the political context in Fiji, DFAT funded a managing contractor to implement a program of work to support the government's health strategic plan. In Solomon Islands, DFAT funds were provided as sector budget support, appropriated directly in to the government's health budgets and accounts and aligned with the MHMS annual operational plans (on-plan, on-budget, on-system).72 Over the time of the evaluation, DFAT provided funds for the remaining focus countries through variations of budget support that reflected only one or two aspects of on-plan, on-budget and on-system. DFAT also introduced PLF in Solomon Islands in 2011–12 using national performance indicators and extended this to the provinces in 2014. At the time of the evaluation, DFAT had also included PLF in its Tonga country program (THSSP2).73

5.3.1 Working in government financial systems

Finding

The use of government financial systems for managing DFAT funds is appropriate and has contributed to effective support of country-led priorities. However, compliance conditions related to DFAT risk management requirements, have at times:

- » imposed high transaction costs and reduced efficiency and effectiveness of working in partner systems
- » undermined trust when requirements are not well explained or are implemented with a heavy hand.

DFAT's experience of working in partner systems developed over the evaluation period. In the Pacific, DFAT introduced standard assessments of recipient country's public financial management and procurements systems to identify fiduciary and other risks inherent in using partner systems and recommended mitigation measures. Such assessments were completed at national level, and at sectoral level as required. This was consistent with DFAT's zero tolerance approach to fraud.

The 2018 Development Assistance Committee evaluation of Australia's development assistance program states that Australia performs well on using government systems in the Pacific.⁷⁴ In the health sector, Solomon Islands is a good example of the benefits of sector budget support and working in government systems, especially with its deliberate focus on supporting reform (Box 7).⁷⁵

^{72 &#}x27;On-plan means donor financing, including program and project funds, is integrated into partner government's strategic planning and policy priorities outlined in supporting documentation behind budget submissions. 'On-budget' means donor financing and its intended use is reported in the partner government's budget documentations. 'On-system or 'On-accounting' means donor financing is recorded and accounted for in and through the partner government's accounting system, in line with the government's own classification system. In Solomon Islands, under this modality, funds were provided directly into government accounts, with an over-arching agreement between governments on the use of the money for specific budget line items. Additional conditions, including procurement 'no objections' and acquittal and audit requirements were also agreed.

⁷³ Tonga Post advised that performance-linked funding (PLF) has been included in the THSSP2 agreement since 2015, but was not well explained, understood or used. Limited information was available on this PLF. It is not considered further in this evaluation.

⁷⁴ Organisation for Economic Development (2018). Development Cooperation Peer Reviews Australia 2018.

Australia and Solomon Islands' governments have a shared goal to strengthen provincial health service delivery, where most of the population live. Australia has contributed to influencing an increase in budgets and subsequently health service delivery to the provinces in two ways. This first way is using PLF under HSSP2 and HSSP3 and agreed program indicator sets a minimum target for the percentage of government recurrent health budget allocated to the provinces. The MHMS has consistently met this target, which has ranged from 30 per cent to 38 per cent of recurrent government funding since 2014 when PLF was first introduced. The second way is under HSSP3, where 40 per cent of core budget support is earmarked for allocation to provincial health care delivery.

Box 7: Working through government systems

DFAT support in working through government systems in Solomon Islands has facilitated an increase in provincial health budgets. This major achievement has contributed to advances in provincial-level planning, management and service delivery. Informants in Solomon Islands talked of a range of benefits, including helping to clarify roles, unlocking the potential to think about new ways to overcome staffing challenges, increasing outreach and conducting supervisory visits.

The data collected for the PLF, however, showed that the outreach was not uniform between provinces. Opportunity exists for further improvement.

DFAT's overall willingness to use government systems⁷⁶ in the health sector inevitably comes with risk management conditions. The evaluation found that these conditions can became more stringent over time in some countries.

- **Tonga**—a parallel annual planning system was introduced in response to a perceived risk of program investment in areas inconsistent with program targets.
- **Solomon Islands**—a series of technical advisers were introduced to manage the additional compliance functions imposed following a significant fraud case identified in 2013. In the aftermath of the fraud, the advisers, while overseeing compliance, also assured that essential procurement was continued. However, the advisers and the additional compliance requirements were still in place during the evaluation team's visit in 2018.

Compliance procedures are usually put in place to account for Australian funds, not Pacific government funds. The evaluation team was told that DFAT's compliance requirements (compounded by inefficient partner government processes) can be counterproductive and hamper investment spending. Informants also said they added transaction costs for government staff, delayed purchases, slowed construction and, ultimately, discouraged the use of program funds. Informants also said that DFAT compliance requirements impacted the ability of technical advisers to build country capacity, as much of their time was spent on compliance requirements.

The compliance requirements also added considerable transaction costs for posts.

- Nauru—in the Nauru Improved Health Program, which was a poor performing program, DFAT's requirements added layers to what was already a complicated government process for procurement. They also hampered implementation.
- Samoa—health partners, including DFAT, agreed to use World Bank procurement procedures. Both the Samoan MoH and development partner representatives highlighted the complexity of procurement, along with other constraints such as limited capacity and understanding of processes by staff, pointing to how they delayed implementation.

Despite these observations, DFAT's compliance requirements are a normal part of funding agreements. DFAT is accountable for public money and compliance is a mandated part of the Australian Government's risk management approach. When this is not fully explained, however, partners may believe that compliance requirements result from mistrust; a perception which itself engenders reciprocal mistrust. A potential by-product of DFAT-supported work by the World Bank on financial management is that it can mitigate the risks of working through government systems and reduce the need for DFAT to apply certain requirements.

5.3.2 Performance-linked funding in the Solomon Islands country program

Finding

The evaluation found promising, if mixed, results in DFAT's use of PLF in Solomon Islands to achieve health system strengthening objectives. There is evidence that PLF provided a useful framework for policy dialogue, increased the focus on results and incentivised health system reforms. Implementation challenges have impacted the effectiveness of PLF over time. Lessons learned in Solomon Islands can inform future consideration of this approach.

DFAT officials expressed this sentiment to the evaluation team in Canberra and during country visits, and it is repeated in Aid Implementation Plans, design documents and OAIs and AOCs. Use of government systems is also a central commitment in international agreements, such as the high-level forums on aid effectiveness and the 2009 Pacific Forum Compact. At least one document per country included a medium to long-term intention to put health investment funds through its government system as sector budget support.

100 100 90 80 80 78 78 70 68 Percentage 60 59 50 40 30 20 10 0 2012 2013 2014 2015 2016 2017 National Provincial

Figure 14: Percentage of performance-linked payments made following independent verification of results in Solomon Islands, national and provincial, 2012–2017

Source: DFAT.

After PLF was introduced in Solomon Islands in 2011–12, between 20 and 25 per cent of DFAT's direct budget support to the MHMS was contingent on achieving measured progress on a set of mutually agreed annual milestones and targets based largely on the government's own performance framework. This PLF component leveraged direct budget support by rewarding its effective use in achieving priority targets. Annual indicators varied, but typically included allocating agreed proportions of government funding to health generally, and provincial primary care specifically, to achieve targets in health outcomes, service delivery, policy development, governance or financial management. Payments were proportionate (ranging from 0 to 100 per cent) to the extent to which targets were met.

When introduced at national level, PLF targets reinforced the importance of health system reform objectives. The targets enabled MHMS to negotiate with the Ministry of Finance and to generate political support for appropriate levels of health funding. At provincial level, PLF incentivised improved performance in annual operational planning and financial management. This was sustained. Additional funding also provided an incentive for strengthening health information recording and reporting, which has also persisted.

The HSSP2 independent completion report concluded that:

... the introduction of performance-linked payments focused the program on results as contrasted with other possible approaches based on inputs or processes ... and led to dialogue on best approaches, systems and procedures to improve performance.⁷⁷

The PLF also focused attention on shifting budget to the provinces, a significant step in decentralisation and local management.

Evidence from annual independent performance assessments reports commissioned to report on progress against PLF targets showed that, from 2015, PLF became a less effective mechanism in leveraging performance as the number of indicators and proportion of development assistance tied to PLF increased.

Figure 14 shows that, from 2015, the proportion of PLF funds dispersed decreased because the proportion of indicators met or partly met decreased. In 2017, for the first time, the pre-condition of the proportion of domestically sourced revenue allocated to the recurrent health budget was not met. This was the result of a one-off change in the government budget for scholarships that impacted on the proportion of total budget allocated to the health budget. This issue has not recurred.

⁷⁷ P Thompson & A Drexler (2015). Independent completion evaluation of Australia's contribution to the Solomon Islands Health Sector Support Program, p. 5. https://dfat.gov.au/about-us/publications/Documents/independent-completion-report-to-the-solomon-islands-health-sector-support-program.pdf

A study examining PLF, including in the Pacific, found that when triggers for payment are achievable by a government and in line with its agenda, PLF payments can help motivate action.⁷⁸ There is, however, a body of research on performance-based financing that identified many of the flaws and implementation issues that can arise and undermine effectiveness.⁷⁹ While the evidence suggests that PLF has contributed to some change in Solomon Islands, documents and interviews also highlighted implementation issues that may have reduced its effectiveness. Issues included:

- technical problems with the selection of indicators (for example, measurability)
- implementation issues relating to the ability to affect change (for example, indicators being agreed too late in the year, not well understood or known by managers or being outside the influence of MHMS)
- concerns around the effectiveness of the related dialogue.

One view expressed was that independent progress assessments and subsequent dialogue focused disproportionately on penalties for not achieving indicators rather than on lessons and remedies designed to enable achievement. A slightly different view expressed by one key informant was that there was insufficient dialogue altogether—even when achievements were declining—on why targets were met or were not met. Such dialogue would have enabled learning that could have led to targets being met.

5.4 Approaches to supporting capacity building

Major finding

DFAT's capacity-building support would be more effective if based on systematic analysis of existing capacity and priorities and of what could reasonably be expected to be achieved in each country context. Technical assistance was the most commonly used approach to capacity building, but it did not always match the nature of the issue trying to be addressed. A mix of approaches that foster Pacific leadership and innovation is more likely to be effective and sustainable. More recent use of other approaches, particularly networks and meetings for data sharing to foster technical and leadership skills and confidence of Pacific ministry and health staff, were positive developments.

5.4.1 Assessing existing capacity planning capacity development strategies

Finding

DFAT's choice of approaches for capacity development was not systematically based on a strategic assessment of capacity development priorities or objectives, or what could reasonably be expected to change in the country context. Where such assessments were made, they were not of satisfactory depth and quality.

Making effective choices about the nature and sequence of support to help Pacific island countries expand their capacity requires being better informed about context, current capacity and government priorities for further development. Independent evaluations and reviews of selected investments in Fiji, Solomon Islands and Vanuatu revealed a lack of explicit, strategic approaches to capacity development in DFAT program designs.

In six of the seven focus countries, selected investments included at least one document with a relatively detailed assessment of current capacity, covering most if not all

⁷⁸ M Doran (2017). 'How new is the "new" conditionality? Recipient perspectives on aid, country ownership and policy reform'. Development Policy Review,

M Pearson, M Johnson & R Ellison. Review of major results-based aid (RBA) and results-based financing (RBF) schemes. Final report. Department for International Development, 2010; Eijkenaar F, Emmert M, Scheppach M, Schoffski O. Effects of pay for performance in health care: A systematic review of systematic reviews. Health Policy; 110: 115–130, 2013; Paul E, Albert L & Bisala BN'S, et al., Performance-based financing in low- and middle-income countries: isn't it time for a rethink? BMJ Global Health 2018;3:e000664. Doi:10.1136/bmjgh-2017-000664

health system functions. ⁸⁰ The exception was the program in Kiribati that did not have a conventional design document. However, analyses were not standardised and appeared to be based on personal knowledge, observations and interviews during a design mission, as well as reference to documents from other Australian-funded investments. No original data were collected, and few details provided about the workforce, skills or team performance. Most commentary focused on capacity deficits rather than strengths and no commentary proposed detailed capacity development strategies. Reports prepared by health ministries or published in external publications, such as *Health in Transition*, were rarely cited, suggesting that authors did not build on previous analyses and evidence to form their assessments.

5.4.2 Capacity development through technical support

Findings

While DFAT's reliance on technical advisers in country programs reduced over the decade, it was still the most frequently used mechanism for capacity building.⁸¹

While it was difficult to evaluate technical assistance in organisational development, it likely contributed to improvements in health systems strengthening and, in some cases, through mentoring, to individual worker skills.

Long-term technical advisers supporting critical functions were preferred because they gained a better understanding of the context and could support the progressive introduction of sustainable changes in ways of working.

Country-led recruitment and co-development and monitoring of work plans were associated with more effective use of technical advisers. Use of national project officers proved effective in Fiji.

National and other Pacific professionals were appreciated for their familiarity with and understanding of the context. These professionals tended to be employed in administrative positions and were underused in technical roles.

International technical advisers

While DFAT's reliance on technical advisers in country programs reduced over the decade, it was still the most frequently used mechanism for capacity building. This approach did not always match the nature of the issue trying to be addressed. Good technical advisers are valued by DFAT and Pacific health ministries for their practical efforts in supporting essential tasks and introducing ways of working that strengthen the performance of health workforce teams and thereby organisational capacity development.

Document analysis, including of the terms of reference of seven recent technical adviser roles in Tonga and Solomon Islands funded by DFAT, found that objectives mentioned included:

- » supporting the improvement of technical processes and activities within health ministry units
- » providing training, mentoring and coaching to individuals related to their functions.

These were not, however, the main focus of any terms of reference, although most included a requirement to develop a capacity development and sustainability plan.

This evaluation found that a proportion of mentions of improved health system performance in documents and interviews attributed this to involving technical advisers for their positive contribution to organisational capacity (including by introducing appropriate and efficient ways of working). Examples included using the open-source District Health Information System in Solomon Islands and developing clinical service networks in Fiji.

While this institutional development was recognised, there were fewer examples of technical advisers contributing to individuals' capacity development. Explanations included absence of designated counterparts and advisers being otherwise busy 'keeping the wheels turning'.

⁸⁰ Analyses appeared in designs for Fiji, Samoa, Solomon Islands and Tonga, situation assessments of sector analysis in Fiji and Tonga, and reviews or evaluations in Nauru, Solomon Islands and Vanuatu.

AusAID, Australian Aid to Health Service Delivery in Papua New Guinea, Solomon Islands and Vanuatu—Evaluation report, June 2009, estimated that technical assistance including training, research and analysis and advisory support accounted for nearly 50 per cent of support (p. 5). DFAT health expenditure data did not provide the amount of funding for technical advisers but it may have been the major part of the funding to contractors, multilaterals and NGOs, which amounted to 40 per cent across all countries (or 30 per cent excluding Fiji). Some of those funds also covered operational costs, procurement and construction. In the documents reviewed by the evaluation team, technical adviser costs were quoted to be about 20 per cent of the total investment budget (17.4 per cent in Nauru in 2015–16, 17.5 per cent budgeted for the Vanuatu Health Program and 26 per cent to 28 per cent for Solomon Islands HSSP3).

In the normal world of health, ministry teams facing staff shortages, inadequate equipment and often limited formal training for their role, preferred 'hands-on', long-term technical advisers who provide high-level support in dealing with complex tasks. Placement of short-term technical advisers was viewed as more problematic because they were perceived to be insufficiently aware of local complexities and less involved in the details of particular tasks. One locally engaged DFAT officer said:

A recurrent challenge is that DFAT funds TA [technical advisers] to develop strategies and plans, but there is no support to socialise and implement them ... It is confusing and frustrating for Post and MoH to spend lots of time recruiting, orientating and working with different STAs [short-term technical advisers]. Also, we have lack of consistency and coherence when different STAs have different opinions about things.

DFAT could increase the effectiveness of technical advisers by ensuring greater alignment of their work with health ministry priorities. Several initiatives during the evaluation period demonstrated good practice in getting the most benefit from technical advisers:

- The appointment of a team leader among a group of advisers on HSSP3 in Solomon Islands who improved coordination between advisers and gave DFAT post and the MHMS executive a single point of contact.
- The implemented regional program on financial management in the health sector (PASA), funded by DFAT and implemented by the World Bank, that was commended for its advisory and analytic work, including on identifying efficiencies.82 The program's success was in part attributed to focusing on the most pressing priorities and finding straightforward ways to address them within the existing system.
- An adviser in Fiji who helped address pressing workforce management issues, such as estimating the nursing staff required by the health service and developing a human resources' database. Practical tools were introduced that the MHMS used to address their priorities. The tools produced information that was successfully used to lobby for additional permanent positions.

The evaluation identified other good practices for the effective use of advisers. For example, country-led recruitment and selection processes were more likely to result in technical advisers with the right skills for working in the Pacific setting (as compared to externally led processes). Co-developing and monitoring work plans and outputs by health ministries and DFAT ensured that technical adviser efforts were appropriately targeted and that country priorities were being addressed, as noted in Fiji and Tonga during country visits.

Using Pacific island countries expertise

Some informants during country visits expressed a preference for using nationals and other Pacific people as advisers because of their experience in regional countries and understanding of context. Pacific people are employed in most Australian country offices in program management positions and, less frequently, as technical advisers in financial management, budgeting and planning. The rationale for their placement, and the value of their contributions, were rarely noted in documents.

A noteworthy example of using Pacific expertise was the appointment of Fijian project officers in the FHSIP. Project officers were consistently noted in independent assessments to be change agents, operating within the system to model, enable and inspire the adoption of new ways of working. The units where they worked experienced significant performance improvements, which sometimes diminished when the project officers were withdrawn and improved when they were reinstated. The project officers also gained leadership experience.

Australian Volunteers

The Australian Volunteers Program provides DFAT and health ministries with a source of hands-on support from people with practical skills and experience, whose costs are covered outside the funding envelope for country health programs.83 Most volunteers supported direct health service delivery. Others assisted with other health system functions including governance, finance and health information. Of the 267 health volunteers posted to the seven focus countries from 2012 to 2018, some 38 per cent had training or education in their job title. Their effectiveness in this regard was not evaluated.

⁸² World Bank (2017). Multi-Year Review of the Pacific Islands Health Sector Program of Advisory Services and Analytics (PI53778): Review Report 2015–2017 Final, December 2017. Internal World Bank document.

ODE's Evaluation of the Australian Volunteers for International Development (AVID) program (January 2014), recommended greater in-country coordination with posts, and alignment with country and aid program priorities. https://www.dfat.gov.au/sites/default/files/avid-report-jan-2014.pdf

The evaluation noted one very positive use of volunteers. This was the placement of Australian medical specialist trainees sourced through Australian medical colleges as trainers and registrars in the Solomon Islands Graduate Internship and Supervision Support Project for returning medical graduates. ⁸⁴ Australian medical colleges accredit up to six months of the Australian volunteers' time in Solomon Islands as an overseas clinical placement, allowing these specialists to take up short-term positions and make a valuable contribution to hospital teams. In this example, the volunteers played a clear capacity-building role, focused on mentoring and supervising Solomon Islands' interns through their internship program. The Australian volunteers were well integrated into the health system under the supervision of senior local doctors.

5.4.3 Supporting individual and team capacity development, including leadership development

Finding

DFAT successfully employed strategies for fostering technical and leadership skills and confidence, including engaging ministry and health staff in sharing and discussing relevant data and information within networks or at meetings.

While technical advisers remained the mechanism most frequently used by DFAT for capacity building in country programs over the decade, DFAT increasingly employed other strategies to develop the technical and leadership skills and confidence of Pacific people in the health sector. These included support for regional and country-level networks which provided platforms for information sharing, problem solving and consensus. Inclusive review and planning meetings at national and subnational levels were also used, including:

- » clinical networks and results networks in Fiji
- » planning meetings in Solomon Islands supported by advisory and analytic assistance, and linked to PLF.

Pacific health ministries find these and similar strategies to be effective in empowering individuals and teams. Several fund such activities through their own budgets or use the program funds channelled through government systems. For example:

- » Fiji now funds Clinical Service Networks
- » Solomon Islands uses sector budget support for scholarships and planning meetings (closely linked to PLF achievements)
- » Tonga holds meetings of all health staff out of its own budget or with matching funds from other donors.

Informants expressed the value of data and information being shared through these networks and meetings. These strategies are also potentially more effective ways to ensure sustainability of capacity development.

Finally, the evaluation also acknowledged the value of encouraging leadership more broadly within society (for example, through NGOs) to act as change agents to encourage the building of stronger health systems. This was not explored specifically.

5.4.4 Choice of capacity development inputs

Finding

Effective contribution to supporting capacity development often required several approaches being employed in concert or sequentially. Filling gaps in key roles, while supporting the training of national staff to fill those roles, is one logical and proven combination.

The document analysis and case studies highlighted how improvements in some health system functions were associated with multiple, reinforcing and responsive forms of support from DFAT over a long period. This implies that DFAT's strategic choice of capacity development approaches is not about which one to use but which ones in combination and/or in what sequence are relevant and appropriate for the context. A combination of reinforcing approaches also has more potential to contribute to sustainability.

⁸⁴ Australian Volunteers International (2018). External Review of the Solomon Islands Graduate Support and Supervision Program, 2018.

Two positive examples of sequencing of capacity development approaches that have led to stronger health system performance and contributed to sustainability of Australia's investments illustrate this point.

- Vanuatu—The need for externally contracted personnel at Vila Central Hospital was reduced over the decade through the return of local medical graduates, including some supported through Australian scholarships. The Vanuatu Medical Workforce Support Program placed overseas doctors in Vanuatu while locals were being trained. In 2002, there were no Ni-Vanuatu consultants or master's degree specialists, compared to 2018 when there were 13 Ni-Vanuatu specialists active in the workforce and four locum specialists drawn from Pacific islands and funded by DFAT through to May 2020.
- Samoa—Strengthening biomedical engineering capacity in Samoa is a positive example. Following support from the regional program for biomedical engineer technical assistance earlier in the evaluation period, Samoa's country programming funded its own long-term international biomedical engineer from 2016. A health service employee was subsequently awarded a scholarship in Australia to study biomedical engineering. The newly qualified graduate took up a position as a biomedical engineer and the adviser is contracted to provide short-term inputs as a mentor on a fly-in-fly-out arrangement for another couple of years. A second Australian trained biomedical engineer was expected to return shortly.

5.5 Coherence within DFAT's health portfolio

Major finding

DFAT posts, health ministry officials and development partners have strong views that DFAT's multiple channels of funding lack coherence and/or coordination. The evaluation team believed that DFAT's support to Pacific country health systems through country, regional and global programs would be more efficient and effective if better coordinated and more responsive to government priorities and processes.

For this evaluation, coherence is defined as something logical or consistent and something that makes sense as a whole from a country perspective.

The evaluation found room for improvement in donor harmonisation in the health sector in the Pacific, including with Japan and likely other donors such as China, India, Korea and Taiwan. It also found clear opportunity for Australia and New Zealand (through Pacific Step Up and Pacific Reset policies) to improve harmonisation in the health sector. However, the most frequent criticism of how DFAT works in Pacific island countries expressed in interviews was not the lack of harmonisation between donors, but lack of coordination between DFAT's own programs.

DFAT funds a multiplicity of investments, activities, and partners under separate funding agreements. Where this overloads management capacity, results in duplication of effort, or missed opportunities to work towards a common goal, the overall effectiveness and efficiency of DFAT's support to countries can be diminished.

As seen in Chapter 3, the 15 selected country health programs included in this evaluation were just some among a large number of DFAT-funded, health-related activities in countries. In 2017–18, for the first time in the evaluation period, country programs represented just under 50 per cent of DFAT's health expenditure in these countries (including Oceania unspecified funding).

Box 8: Coherence among programs—positive examples

DFAT's Health Information System Knowledge Hub, a regional program which helped support the Pacific Health Information Network (PHIN), was identified by country stakeholders in Fiji as very useful in supporting its country-level health information system activity. The evaluation of the network stated that:

PHIN's output and contributions to the health information community flourished in the past when there was funded Secretariat support to hold regional events, mostly from the HIS [health information system knowledge] Hub at the University of Queensland. During that time, research was generated, priorities for HIS were established amongst the countries and active engagement was observed.

Source: p. 31, Evaluation and renewed vision and strategy for the Pacific Health Information Network (PHIN)—Western Pacific Region and Pacific community.

DFAT's regional program supports the World Bank's PASA program which focuses on strengthening financial systems. DFAT's regional program develops detailed work plans for the specific countries in which it works. Despite being funded through separate programs in DFAT, informants considered their contribution to be coherent. DFAT informants also saw these programs as complementing and reinforcing their own policy engagement on health financing, as the World Bank was also engaging countries on these same messages.

Solomon Islands

DFAT's support through its country program for Solomon Islands was instrumental in getting the Global Fund to Fight AIDS, Tuberculosis and Malaria, a global program which DFAT also supports, to agree to fund the country's malaria program on a more efficient cash-on-delivery funding model. Through the country program, DFAT front-loaded funding for implementing the malaria program. When the Ministry of Health proved to the Global Fund that implementation was complete, funds were released to the Solomon Islands Government. Solomon Islands is one of only two countries in the world where the Global Fund is using this funding model.

Tonga

DFAT's support through its regional Tupaia program for the Fanafana Ola project, is supporting the roll out of DHIS2 as a public health information system in Tonga. In this case the country program, in conjunction with country partners, played a significant role in influencing the regional program's funding of this project. It builds on a pilot project supported by the country program and reflects concerns with the state of health information systems in Tonga, for which limited support is provided within the country program.

The evaluation team found several examples of DFAT-supported activities channelled through different funding mechanisms and partners being coherent and having complementary effects on health system strengthening (Box 8). However, many informants from DFAT, Pacific governments and development partners expressed concerns about the lack of coherence or coordination of DFAT health investments. In most instances this related to poor coordination between programs or activities supported by DFAT within a country, which sometimes reflected lack of coordination between country and regional programs, or between DFAT posts and DFAT Canberra.

The evaluation found that in bilateral aid investment plans, DFAT's regional programs were usually mentioned and global programs were not. Both were only superficially mentioned in country program design documents to ensure they work towards national objectives and complement other DFAT support. One consequence of this was missed opportunities for complementary action to strengthen health systems. Another was duplication of effort.

Several regional and global programs over the evaluation period focused on single diseases or topics such as avoidable blindness, which evaluations have consistently shown often operate in parallel to government health systems, while placing heavy short-term demands on them without a specific objective to sustainably strengthening them.85

Other concerns about the lack of coordination between DFAT programs included:

- » additional transaction costs and workload for DFAT and government staff of managing multiple programs
- time consuming attendance at multiple meetings
- missed opportunities for synergy between programs (for example, when different programs place advisers on related topics in different ministries and duplicate effort or work at cross purposes).

Regional or global programs support other organisations (for example, UN agencies) to provide inputs in different areas. These are not always well coordinated with DFATfunded country programs or government priorities. The organisation's operating procedures impose further transaction costs on the government that may delay implementation. In Solomon Islands this may have contributed to low implementation rates in some areas of the MHMS, such as reproductive, maternal, newborn, child and adolescent health.

Based on this evaluation's focus, concern was raised that multiple and diverse funding channels and topics may put into question DFAT's commitment to health system strengthening, and to responsiveness to country-led priorities, as its overarching objectives for health investments.

Programming on health security is largely about health system strengthening and should provide opportunities for mutually reinforcing interaction with major investments that have this primary objective. ODE's evaluation of a decade of Australia's efforts to combat pandemics and emerging infectious diseases, for example, found that in the Pacific, where DFAT still has significant bilateral health programs, there is a need to better integrate this disease work with the broader health systems strengthening agenda of those programs. It is recommended that regional emerging infectious diseases programs should reinforce existing health sector structures and planning processes, especially in the Pacific.86

5.6 Monitoring and evaluation

Major finding

DFAT, appropriately, relied heavily on government health information systems, supplemented by surveys and other data collection, to monitor its programs. Even with significant investment and improvement in information systems, however, it was difficult to link program inputs to outcomes and measure their impact. This reflects deficiencies, including in qualitative evaluation, operational research and research capacity development, which need to be addressed to better understand health system and program progress. DFAT and Pacific governments need to be clearer on the purpose of M&E in programs.

The 15 selected country investments used a range of M&E approaches (Annex 1, Table 11). Evaluations, reviews and other documentation, as well as interviews during country visits, highlighted important program achievements. Frequently, this led to positive change in practice and, in some cases, health outcomes. As is commonly the case with development programs, however, it was difficult to demonstrate a strong results chain from inputs to improved system performance and better health.

C Burkot & K Gilbert (2017). 'Reducing malaria in Solomon Islands: lessons for effective aid', Development Policy Centre Discussion Paper, Australian National University, November 2017; ODE (2017). Evaluating a decade of efforts to combat pandemics and emerging infectious diseases in Asia and the Pacific 2006–2015: Are health systems stronger? https://dfat.gov.au/aid/how-we-measure-performance/ode/strategic-evaluations/Pages/pandemics-and-emerging-

⁸⁶ ODE (2017). Evaluating a decade of efforts to combat pandemics and emerging infectious diseases in Asia and the Pacific 2006–2015: Are health systems stronger? https://dfat.gov.au/aid/how-we-measure-performance/ode/strategic-evaluations/Pages/pandemics-and-emerging-infectious-diseases.aspx

5.6.1 Monitoring and evaluation rely mostly on government health information systems

Finding

DFAT is committed to using government health information systems to monitor performance. Concerns about the quality of data led DFAT to provide greater support for strengthening them. This, in turn, improved M&E and governance.

As most DFAT health programs are implemented by Pacific health ministries it is appropriate that DFAT relies on government health information systems to monitor performance, as do UN agencies and other partners. In the focus countries, most DFAT investments did not have a separate M&E framework, the Fiji program being an exception. In Fiji, Solomon Islands and Vanuatu, DFAT provided significant and long-term technical and financial support to improve the quality of health information systems. While challenges remain, the Fiji and Solomon Islands programs demonstrate how this approach improved health information systems and monitoring and performance over the evaluation period.

Solomon Islands

When the SWAp began, the ministry did not have a core set of indicators to monitor its health system performance. It now produces annual national reports against a core set of indicators, which are also used to track implementation of PLF indicators. The evaluation team saw examples of provincial performance maps and reports under development. However, data quality, availability and use continue to be issues. Also, there is growing recognition that current monitoring needs to be supplemented if country partners and DFAT are to better understand if progress is being made in how the health system is functioning and if it is expected to improve health.

Fiji

The M&E framework for Fiji's HHSP is a good example of a rigorously developed system that has evolved over several years. It is based on MHMH's own monitoring framework. As such, it incorporates feedback from DFAT and a technical advisory group on weaknesses in the government health information system. The program invested considerable financial and technical resources in strengthening health

information as well the MoHM and DFAT program systems for planning, reporting and M&E. The final evaluation of the framework noted that support to M&E has helped improve the coherence and quality of indicators being used in the corporate planning process. Despite this, the final evaluation concluded that:

Internal monitoring and evaluation has evolved. It is now rigorous and largely based on MoHM's own monitoring framework. However, there is lack of outcome data for specific program interventions and scope to add some targeted impact studies.⁸⁷

5.6.2 Surveys and operations research

Finding

DFAT invests in valuable intermittent population-based surveys to measure outcomes, service coverage and health risk factors. Investment in other primary data collection, operations research and development of research capacity is relatively limited.

One shortcoming of using national health indicators for M&E is that they cannot measure all parameters of interest. For example, population surveys are necessary to determine if intended beneficiaries were reached. DFAT has supported multilateral organisations to conduct such surveys in partnership with national statistics offices. These include demographic and health surveys, which measure use of essential health services and complement health service statistics. These surveys may also measure the quality of domestic and community health infrastructure (for example, water and sanitation and power sources) and some biometric indicators.

DFAT has also supported STEPs surveys, the WHO tool for monitoring NCD risk factors. These track changes in underlying behaviours and biometric indicators. These surveys are important but often their timing is not synchronised with country-led planning cycles (or DFAT program cycles). This is compounded by considerable delays in reporting. For example, preliminary results from the Tonga STEPs conducted in 2016 were still not available at the end of 2018.

⁸⁷ A Chattoe-Brown & S Majid (2016). Fiji Health Sector Support Program End of Program Evaluation: Final Report, Mott McDonald, June 2016. https://www.dfat.gov.au/sites/default/files/fiji-health-sector-support-program-final-evaluation.pdf

AQCs and other reports frequently observed lack of information linking supported activities to outcomes. The number of reasons for this include relatively few instances of ongoing evaluative activities to capture activity performance. Of the seven focus countries, only Fiji and Tonga Health (through THSSP2) had internal research, evaluation or quality assurance units within their health ministries.

Evaluations and operational research can measure outputs and longer-term outcomes, including improved quality of care measures such as equity through national health system data disaggregated (examples are by geography, health facility, sex, age, ethnicity or disability). Often, however, additional primary data collection and analysis using participatory methods and Pacific knowledge frameworks are needed to establish other measures of the health system's quality of care.

One issue raised was lack of M&E on the quality and effectiveness of efforts to support country's capacity development. Observations ranged from lack of baseline assessment of capacity to inform designs to limited documentation of the outcomes of capacity development activities such as technical assistance, mentoring, training and scholarships.

The only mention in documents from funded efforts to support research capacity in country programs was the development of a new research stream in the Fiji National University Bachelor of Nursing, which was well attended, and support for a research component in Tonga.

Outside of country programs, six health-related regional research programs were operating in the Pacific during the evaluation period (Annex 1, Table 12). Two, which had recently started, related to health security and have not yet been evaluated. Most implemented earlier by Australian universities had been evaluated. Findings were mixed. Research on the contribution of the Australian Development Research awards scheme, however, identified several examples of research influence in Pacific island focus countries. Capacity development activities were ad hoc, and the short timeframe limited prospects of lasting institutional strengthening for research in Australia or Pacific island countries.

5.6.3 The purpose of monitoring and evaluation

Finding

Within DFAT and between programs there were divergent views on the purpose of M&E.

Many evaluations concluded that DFAT's M&E processes were of uneven quality, which had implications for program design, oversight and effectiveness.

A recent ODE evaluation of investment monitoring by managing contractors made practical recommendations based on good practice.88 These related to clarity of monitoring purpose and included:

- standardising monitoring expectations across managing contractors
- resourcing M&E activities as part of implementation
- reinforcing the importance of a strong performance culture among DFAT program managers.

This evaluation reached similar conclusions. While all DFAT officers interviewed wanted good information to monitor performance, improve investments and promote the results of DFAT development assistance, there was less clarity about what was needed. In a focus group of DFAT officers recently returned from Pacific postings, for example, opinions on what was needed from M&E ranged from measuring high-level health improvements to fine-grained evidence of changes attributable to program support.

A starting point to increasing M&E effectiveness would be discussions between DFAT and Pacific governments about purposes and opportunities for enhancing M&E. The evaluation found that the reviews between DFAT and Pacific governments on progress happened retrospectively, not during program design, which is the right time to clarify what is realistic to achieve, and how.

M&E needs to be a continuous cycle of planning, implementation and learning at all levels of the health system, and for DFAT at all levels of activities, program and longer-term partnerships with the Pacific health sector.

ODE (2018). Evaluation of DFAT investment level monitoring systems. https://dfat.gov.au/aid/how-we-measure-performance/ode/strategic-evaluations/ Pages/evaluation-of-investment-level-monitoring-systems.aspx

5.7 DFAT capacity

Major finding

Expanding DFAT's good practices in supporting country-led priorities for strengthening health systems will require technical health, development and Pacific expertise (including an understanding of working in partner systems). Access to technical health expertise varied considerably over the evaluation period even though it is considered critical to designing and implementing effective health programs. DFAT has also underused the expertise of locally engaged DFAT staff and did not adequately recognise the strong leadership available from Pacific people, including diaspora, as national or regional experts.

Discussion in documents and interviews on DFAT capacity drew attention to perceived deficits in the number, skills and experience of DFAT staff to support DFAT policies and aspirations in health and development. Several design documents of the health investments selected for this evaluation raised DFAT capacity, particularly at posts, as a risk to program implementation and more broadly the quality of DFAT's engagement. 89 These discussions raised issues about DFAT's capacity to engage with government and development partners on strategic and technical matters. This related to both lack of expertise and the heavy administrative burden of managing complex and ambitious programs.

5.7.1 Technical health capacity

Findings

The evaluation found that changes in access to technical health expertise over the period contributed to weaknesses in DFAT's design and implementation of health programs in the Pacific.

Outsourcing of technical support to contractors or multilateral organisations is a partial solution, but DFAT expertise is still needed for quality assurance and effective engagement with Pacific governments. Accountability cannot be outsourced. Concerns related to technical expertise have been raised in DFAT's internal assessments of its human resources for development. DFAT recognised that it needed a diverse range of complementary employment types and employees to draw on including heads of profession, locally engaged staff, Australian public servants, and technical experts. Technical experts were seen 'to provide credibility in our engagements with partners on complex development issues, pursue innovation and manage risk in aid investments.' 90

Over the evaluation period, the number of health advisers increased and then declined. In Canberra there was a Principal Sector Specialist for most of the evaluation period, along with a varying number of health advisers providing support to DFAT's country, regional and global health programs from DFAT's Health Policy Branch. The Canberrabased Pacific Division (or its equivalent) had three health advisers in 2012 and 2013 and one from 2014 to 2017. Since 2018 there has been no dedicated Pacific health adviser.

Data on the numbers of DFAT dedicated health positions or staff with health-related qualifications and experience is not readily available. One count from 2008 to 2014 showed an increase in the number of roles (Canberra and post-based) with 'health' in the title: between 8 and 12 in 2008 to 2010; 21 in 2011; 27 in 2012; and 42 in 2013. In 2014, the number had returned to 21. Mention of 'health' in the job title does not necessarily imply that health is the only focus of the position or that the post calls for health-related qualifications.

Currently, Tonga and Solomon Islands have designated Australian DFAT officer positions for health. These posts and Fiji, Kiribati, Samoa and Vanuatu also have locally engaged staff, several with substantial sector expertise as well as corporate memory and established professional networks.

More recently, the posts in Kiribati, Nauru, Tonga and Vanuatu (to a more limited extent) have contracted (external) senior health advisers to provide repeated short-term support on strategic or technical health matters.

Many major country health programs operating during the evaluation began when there was more technical health capacity within DFAT. With investments of similar size and ambition but fewer numbers of staff with technical expertise, informants believed that effective program implementation was becoming more difficult to sustain, especially as compliance issues were so time-consuming. External technical advisers have to some extent filled gaps in expertise, but this shifted engagement from DFAT staff. One DFAT officer reported being told by senior DFAT officers 'not to over-think it' because that was the job of long-term technical advisers.

⁸⁹ Fiji HSSP design, Solomon Islands HSSP3 design, and Tonga HSSP2 design. Internal DFAT document.

⁹⁰ DFAT, Workforce Plan—International Development—Phase 1, April 2019, p. 2. Internal DFAT document.

Key informants from development partners and DFAT itself referred to DFAT's limited technical health capacity. Several DFAT officers reflected on when they had ready access to health advice on designs, which they saw as critical to designing and implementing effective health programs and understanding the bigger strategic picture. Several noted that the move to generalist staff could be managed through technical support from Canberra, although this support has diminished.

Even when posts have locally engaged or Australian staff with health expertise, a high proportion of their time is taken up by the substantial management and compliance workload. DFAT posts have tended to contract out recruitment of technical advisers for governance and financing functions to commercial contractors, and recruitment of technical advisers for health services and health information to WHO or other technical agencies.

Some key informants flagged that some DFAT staff at posts were inexperienced and did not have a full understanding of the contexts in which they were working. This might have compromised the effectiveness of DFAT support. This distance directly affects DFAT's ability to assure the quality of services supported with department funding and partly explains the lack of a clear line of sight to results in investment designs and M&E frameworks. This is compounded in posts where DFAT staff do not themselves have health expertise.

Sourcing contracted health advisers for Pacific health programs has only provided a partial solution for some problems arising from the changes in DFAT technical health capacity and inconsistency of advice sometimes created by multiple inputs from different short-term consultants. However, contracted heath advisers should not substitute for regular and informed in-country engagement between the Australian and Pacific governments. Furthermore, DFAT requires skills to quality assure adviser advice, recognising that it may cover a complex country context and international best practice on a broad range of health issues.

5.7.2 Development assistance capacity

Finding

Lack of knowledge and skills in development assistance was recognised by DFAT as an impediment to optimal program management and resulted in missed opportunities for greater DFAT influence on health development.

Achieving positive impacts on health systems through development assistance is not just about technical health expertise. Development experience and expertise are also essential.

Many informants told the evaluation team that DFAT officers responsible for the health portfolio were typically only in country for one to three years and were relatively junior or new to development. They not only lacked experience, but often represented DFAT in meetings where it would have been more appropriate and more respectful for a more senior official to be involved. Posts where the Head of Mission established a direct relationship with the health minister were more likely to have meaningful policy dialogue and frank discussion about issues.

DFAT health staff need support to develop skills in development. These include the ability to engage appropriately and develop partnerships with:

- government officials about priorities and implementation strategies
- DFAT officers responsible for other DFAT-funded programs
- development partners.

DFAT staff knowledge of the country context and political economy is essential, as is the ability to respond pragmatically to contextual changes without losing sight of the goal. Knowledge of development principles includes an understanding of how change happens and how DFAT can strengthen capacity for developmental change. DFAT officers no longer have access to dedicated support on how best to contribute to capacity development. This was suspended in 2014.91

⁹¹ The Capacity Development Panel of Experts, which advised DFAT and contributed substantially to policy and programming, ceased in 2014, and there is no consistent advice provided to advisers in health or other sectors on how to undertake their work in a way which contributes effectively to changes in capacity.

The evaluation also heard that although DFAT was one of the big players in health in Pacific island countries, it missed opportunities to have discussions at a high-enough level. High-level discussions tended to focus on macro-economic issues and infrastructure, with health falling through the cracks. Hence, DFAT underused its diplomatic relations with countries and multilateral organisations to advocate for reforms that would contribute to health system strengthening, not recognising the goodwill and economic benefits of improved health.

5.7.3 Use of Pacific capacity and capabilities

Finding

DFAT has not adequately recognised the strong leadership available from Pacific people, including diaspora, and the benefits of engaging them as national or regional experts. This hinders the effectiveness of DFAT support. The Pacific expertise of locally hired DFAT staff is also underused.

For strategic insights, health expertise and practical advice on implementation issues, Australian DFAT officers tend to rely on long-term technical advisers based in health ministries or short-term international health advisors. This undervalues the role of health ministry staff and other Pacific experts as the most knowledgeable people on the history of and opportunities and constraints in the health system.

Investment designs, an important phase of aid programming, rarely have Pacific people on design teams. The typical design process does not allow for meaningful discussion with Pacific government representatives over an extended time, resulting in lack of informed content about the country context, system strengthening, and opportunities and feasibility for change.

Locally engaged staff at DFAT posts are also a potential resource for increasing context-relevant expertise in health. While acknowledging that their technical knowledge may vary, this does not explain why they are seldom fully used for their knowledge of the national health sector and its systems, and of sources of evidence and expert advice. The evaluation found locally employed staff had the knowledge of context and institutional memory to provide insightful assessments of the strengths and weaknesses of DFAT approaches to supporting improved health system performance. However, in general, this was not sufficiently recognised. Locally engaged staff were given little authority and were made responsible for administrative, rather than partnership and collaboration, matters even though their on-the-ground understanding of relationships and established contacts could be of great benefit.

Chapter 6: How can DFAT improve its contribution?

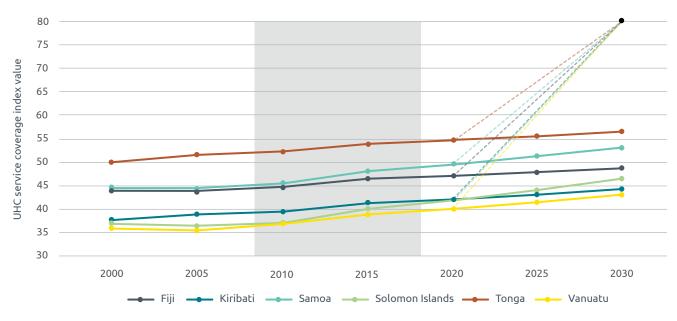
This chapter sets out the evaluation's conclusions. While acknowledging the progress made in strengthening health systems in Pacific island countries, the chapter highlights that if present trends continue, Pacific island countries will fall far short of the target of achieving UHC by 2030 (Figure 15). Recognising the importance of partnerships between DFAT and Pacific island countries and ways of working together to achieve stronger health systems in the future, this evaluation identifies five strategic areas for improvement, along with six recommendations. A summary of findings and related recommendations is also included.

Progress has been made in strengthening health systems in the Pacific, as evidenced in rising values for the UHC health service coverage index, one of the global indicators devised to track progress towards the SDG 3.8 target. Slow progress, despite long-term support and considerable DFAT investment, to a large extent results from the considerable challenges faced within and beyond Pacific health systems.

For Pacific governments to accelerate health system improvement over the coming decade, even more effort and support will be needed. Development partners, including Australia, must ensure their investment decisions and approaches contribute effectively and efficiently and support Pacific people themselves to address the complex and dynamic issues involved.

Each Pacific island country has its own contextual factors, international influences, health systems structure and lessons learned about how to achieve success. This means that DFAT needs to adapt its approaches to each country context. As the major development partner in the health sector, Australia has a unique opportunity to shape future interventions in partnership with Pacific island countries.





Note: Coverage index for essential health services (based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access). It is presented on a scale of 0 to 100. Values greater than or equal to 80 are presented as 80 as the index does not provide fine resolution of high values. Grey area is the evaluation period 2008–09 to 2017–18.

Chart: DFAT. Source: Global Burden of Disease Study 2019, http://vizhub.healthdata.org/sdg/ Accessed 9 April 2019.

6.1 Strategic areas for improvement

This evaluation highlights the importance of partnerships and ways of working together to achieve stronger health systems. It identified these five strategic areas for improvement, along with recommendations.

1. Making universal health coverage central

In line with the 2030 Agenda for Sustainable Development, which calls for a holistic and integrated approach to tackling global challenges, UHC is the logical central focus for DFAT's future investments in health in the Pacific. UHC has been prioritised by Pacific island health ministers. It is consistent with the SDG emphasis on leaving no-one behind and with DFAT's own policy interests, including on gender and social inclusion. Health ministers in the Pacific islands have recognised that strengthening primary care and preventative services is essential to achieving the Healthy Islands vision and the SDGs.

Tailoring their approach to achieving UHC in line with their individual country circumstances—including the need for health promotion and illness prevention activities required to address the growing burden of NCDs—will be critical. Continued support for sustainable health system strengthening is the key means to progressing UHC. Setting milestones and monitoring progress towards achieving UHC health coverage index targets and the Pacific's own Healthy Islands Monitoring Framework could become part of Australia's agreement with Pacific island countries.

Recommendation 1

DFAT's next health strategy should articulate UHC as the overarching goal of its health commitment in Pacific island countries, recognising the importance of primary health care and including public health services designed to promote better health and prevent illness.

DFAT should:

- » support country tailored, strategic approaches
- » embrace the SDG principle that no-one should be left behind by any country's health system and address barriers to access, including gender-related barriers

- » be clear that continued support for sustainable health system strengthening is Australia's preferred approach
- » recognise that efforts may at times require supporting critical inputs to service delivery (health facilities, staff, equipment and consumables) to provide the foundations upon which to build stronger health systems and achieve UHC.

2. Taking partnerships seriously⁹²

Partnerships between Australia and Pacific governments are critical for effective development investments; however, they need to be taken to the next level. Equal partnerships are needed which work collaboratively and demonstrate shared responsibility and mutual accountability. Understanding context, openness, engagement with partners, and respectful collaboration at all levels is required. Poorly founded relationships, with inadequate consultation in decision making, lead to mistrust and misunderstanding around objectives and priorities. This can undermine DFAT's program effectiveness.

Good partnerships, which allow for adaptive and flexible implementation processes and are responsive to learning and change, are characterised by:

- » joint analysis of issues
- » joint analysis of capacity strengths and needs
- » co-design of investments and governance mechanisms
- » inclusive negotiation
- » agreement on responsibilities, modalities of support and measures of success.

DFAT resources for health system development in the Pacific inevitably fall short of meeting every need. In addition, events inevitably occur, such as natural disasters or political change, that change perception of priorities. Policies also change in DFAT and in partner countries. In this context, there is the need to balance investments across demands.

While long-term investment in broad sustainable health system strengthening is DFAT's priority, short-term demands or narrowly focused disease-oriented programs may need to be supported for humanitarian or political reasons. Similarly, choices will need to be made between investing in health through global, regional programs and/or country programs. These choices have implications for partnerships and the effectiveness and efficiency of DFAT's investments. Engagement on and clarity about choices will help build and maintain good partnerships.

⁹² The principles and methods espoused by the Partnership Brokers Association and The Partnering Initiative are well-founded. They are used by DFAT in other sectors and highly relevant for working collaboratively to address complex development issues. In particular, structured partnership development approaches seek to identify shared interests, negotiate agreed ways of working and respective levels of commitment and monitor quality/progress of the partnership (alongside progress of the work undertaken). Supported partnership processes focus on: levels of trust; transparency; respect; shared goals; and benefits and shared responsibility for risks, equity, openness, mutual accountability, shared commitment, and interests in achieving more than the individual partners can achieve on their own (for example, the opportunities for learning, innovation and risk taking to suit each context and time).

Furthermore, without strong coordination these global and regional programs can undermine DFAT's focus on supporting national priorities, for example, by ignoring Pacific government priorities and planning systems and cycles. Having Pacific regional decision-making bodies prioritise and endorse DFAT regional programs and adapting programs to each country context, would greatly enhance their acceptability and effectiveness.

Recommendation 2

DFAT should have more deliberate and structured partnerships with its Pacific island health partners. This should include strategic and programming governance arrangements, and ongoing monitoring of partnership quality.

DFAT should also:

- » Engage with partners on, and be more transparent about, the rationale behind its choices to help maintain trust. This:
 - requires DFAT to engage with partners on choices, and assess trade-offs and consequences of investment choices during planning
 - includes choices between health systems strengthening and support for short-term demands or highly focused disease-oriented programs
 - includes choices between country versus regional or global programming.
- Jointly explore with Pacific island governments lessons learned on working in partner systems and lessons learned with performance-linked funding, including:
 - the inherent trade-offs between opportunities and challenges
 - co-designing future programs to help develop effective and efficient Pacific island funding modalities.
- Aim for all health investments to be consistent with, and reinforce where possible, Pacific island government health plans, processes and structures, for better decision making at country and regional levels.
 - All health investments should be included in DFAT country-level aid investment plans to encourage improved coordination and coherence of health investments.
- Invest in building country capacity to engage and fully participate in partnerships with DFAT.
 - This includes mentoring, providing administrative support and mechanisms to access evidence and current best practice.

3. Driving change through knowledge and evidence

Generating, analysing and using sound information and data is critical to informing health system strengthening. It helps those responsible to understand what is working and where improvements are needed and makes them aware of the connection between their efforts and expected outcomes. Investing in Pacific people as M&E specialists and in evaluation and research partnerships, which promote reflection and analysis, is essential.

Given the complexity and growing demands on health systems, continuous attention to evaluation and research is required. This will be enriched by inclusion of communities and health service users and providers as sources of information and participatory and culturally relevant Pacific evaluation methodologies.

DFAT also needs to be deliberate in its support to countries to drive change through knowledge and evidence.

Recommendation 3

DFAT should continue to support and use Pacific island government health information systems recognising that these systems, along with other health system building blocks, such as human resources and financing for health, are essential foundations.

DFAT should also:

- » Explore, where appropriate, a whole-of-government approach to information systems (for example, human resources).
- » Adopt a structured approach to investing in more analytical and research capacity within Pacific island countries.
- Evaluate its own programs by fostering co-analysis of program effectiveness and associated decision making. This should, in turn, be used to inform future investment.

4. Investing in Pacific island leaders and solutions

Pacific island leaders working in ministries and health services are ultimately responsible for leading and implementing long-term improvements in health systems. Investing in Pacific leaders is important to sustainably strengthening these systems. It will allow DFAT investments to take advantage of their knowledge of context, capacity and what is most likely to succeed.

Supporting Pacific leadership (individually or collectively) is more than a leadership course; it requires a tailored approach taking contextual factors that influence leadership into account.

A wide range of approaches to support Pacific leaders to achieve their potential, including a mix of mutually supportive contributions, will most likely be effective. This may include support for:

- » professional networks
- » staff exchanges and placements
- » leadership development
- » collaborative methodology⁹³
- » operations research
- » facilitation of strategic planning.

Solutions to local health challenges can be found locally, even in low-resource settings, if people who know the context well have access to technical or other assistance. Externally proposed innovations can often miss the mark with relevance and sustainability. Flexibility and responsiveness in policy dialogue and programming are key, with openness to exploring locally developed innovations that can help overcome barriers to access and improve service quality. Innovation may require encouragement and access to small-scale support (for example, specialist advice, connection with professional networks or small grants).

Recommendation 4

DFAT's contribution to Pacific island health systems should prioritise investment in Pacific island leaders working in ministries and health services, including clinical and managerial cadres. DFAT should do this at all levels.

DFAT should prioritise nursing cadres as they are the backbone of Pacific health systems.

Recommendation 5

DFAT should base its capacity-building investments on joint analysis of needs and priorities of what could reasonably be expected to be achieved in each country context. This means moving beyond heavy reliance on technical assistance to using a mix of approaches, including:

- » encouraging and supporting Pacific island countries to lead innovations to address health system challenges
- » making greater use of Pacific diaspora, as technical advisers for program design and evaluation.

5. Lifting DFAT performance through team effort

Continued efforts to focus attention on the quality and performance of investments and the quality of leadership and joint governance, in particular, will help ensure that DFAT's contributions to Pacific health systems achieve maximum benefits. This will not happen without specialist expertise in health and development, including in policy dialogue, to ensure advice given and decisions taken are informed and relevant. Also needed is a deeper understanding of Pacific islands as part of, or accessible to, DFAT teams. While specialist expertise can be sourced externally, in-house expertise is critical to oversight and credible representation.

Greater use by DFAT of Pacific expertise for technical and programmatic advice, including from Pacific staff at posts, would take advantage of a greatly under-used resource. Tapping into the diverse, skilled and experienced diaspora of Pacific health experts to contribute to strengthening health systems in the region will add value to DFAT's work.

Recommendation 6

DFAT should strengthen its own technical, development and Pacific island-related capacity, and quality assure external technical health expertise provided. This is essential to supporting Pacific island partnerships and programs.

Possible mechanisms to achieve this could include:

- » ensuring that all DFAT teams providing health advice and managing programs include, or have access to, health, development and Pacific island expertise, such as the skills needed to facilitate genuine partnerships
- » increasing the number and seniority of Pacific island health professionals in DFAT posts and as advisers (locally engaged or from the Pacific diaspora in Australia and in the region)
- » appointing a senior Pacific island health adviser to support and mentor DFAT staff and engage Pacific island governments.

⁹³ The collaborative approach requires groups to come together to share their knowledge and ideas on a particular area for improvement. This can work across authorities and organisations or between different teams within an organisation. Ownership is very important in any change management approach, so the groups themselves need to work with the people using their services to identify areas for improvement. https://www.scie.org.uk/publications/guides/guide34/background/whatis.asp

Table 10: Summary of findings and related recommendations

Major finding

DFAT's international health and development policies and strategies set the broad framework for its support for strengthening Pacific island health systems. Performance improved across focus countries in each of the health system functions. Opportunities exist to better align DFAT's future policies and strategies with the health priorities of the seven countries, especially with growing support for UHC and to apply the lessons learned in this evaluation.

A focus on UHC, however, will require greater understanding of the extent of inequity in accessing services and the factors exacerbating or impacting access in Pacific island countries. It will also at times require supporting critical inputs to service delivery (health facilities, staff, equipment and consumables).

Major finding

Overall, DFAT's contribution included improved performance in country health systems, in:

- » governance and leadership
- health financing and public financial management
- improvements in health information systems
- health services.

Major finding

DFAT support also contributed to strengthening the capacity of individuals and institutions, especially through support to health workforce training institutions and scholarships. Improved coordination and planning between the scholarship program and human resource priorities of health ministries will further maximise the value of scholarships in addressing gaps in the health workforce.

Recommendations

Recommendation 1

DFAT's next health strategy should articulate UHC as the overarching goal of its health commitment in Pacific island countries, recognising the importance of primary health care and including public health services designed to promote better health and prevent illness.

DFAT should:

- support country tailored, strategic approaches
- embrace the SDG principle that no-one should be left behind by any country's health system and address barriers to access, including gender-related barriers
- be clear that continued support for sustainable health system strengthening is Australia's preferred approach
- recognise that efforts may at times require supporting critical inputs to service delivery (health facilities, staff, equipment and consumables) to provide the foundations upon which to build stronger health systems and achieve UHC.

Major finding

Partnerships between Australia and Pacific island countries, formal and informal, are critical to DFAT's contribution to strengthening health systems. Strategic engagement and policy dialogue around shared objectives, with the right level of representation from both sides and with evidence-informing discussions, contributed to stronger partnerships. It also created a supportive environment in which improvements in health systems were achieved.

Where this was absent, partner countries perceived a lack of respect and mutual distrust, which inhibited frank discussion between individuals on an equal standing. Lack of flexibility and adaptability in how DFAT supported countries to strengthen health systems constrained what partnerships achieved.

Major finding

DFAT predominately channelled its health funding through government systems. Working within partner systems has many advantages, including opportunities to strengthen them. However, it also has challenges. Necessary risk management requirements, for example, can impose high transaction costs that can reduce efficiency and effectiveness.

PLF in Solomon's Islands provided useful lessons for when and how to use this modality.

With a decade of experience, the evaluation concluded it is timely for DFAT and Pacific island countries to jointly explore opportunities and challenges of funding through government systems, and the lessons from PLF.

Major finding

DFAT posts, health ministry officials and development partners have strong views that DFAT's multiple channels of funding lack coherence and/or coordination. The evaluation team believed that DFAT's support to Pacific country health systems through country, regional and global programs would be more efficient and effective if better coordinated and more responsive to government priorities and processes.

Major finding

DFAT continuously supported health development in the seven focus countries. Some changes in the amount and type of funding were made, reflecting changing Australian Government development policy.

Recommendations

Recommendation 2

DFAT should have more deliberate and structured partnerships with Pacific island health partners. This should include strategic and programming governance arrangements, and ongoing monitoring of partnership quality.

DFAT should also:

- Engage with partners on, and be more transparent about, the rationale behind its choices to help maintain trust. This:
 - requires DFAT to engage with partners on choices, and assess trade-offs and consequences of investment choices during planning
 - includes making choices between health systems strengthening and support for short-term demands or highly focused disease-oriented programs
 - includes making choices between country versus regional or global programming.
- » Jointly explore with Pacific island governments lessons learned on working in partner systems and lessons learned with PLF, including:
 - the inherent trade-offs between opportunities and challenges
 - co-designing future programs to help develop effective and efficient Pacific island funding modalities.
- Aim for all health investments to be consistent with, and reinforce where possible, Pacific island government health plans, processes and structures, for better decision making at country and regional levels.
 - All health investments should be included in DFAT country-level aid investment plans to encourage improved coordination and coherence of health investments.
- » Invest in building country capacity to engage and fully participate in partnerships with DFAT.
 - This includes mentoring, providing administrative support and mechanisms to access evidence and current best practice.

Main findings	Recommendations
Major finding	
DFAT made a significant financial contribution to the health systems of all seven countries.	
DFAT had a large number of programs in each country which, at times, led to a complex set of programs for countries and DFAT posts to deal with.	
Major finding	
The majority of DFAT's country program funding was purposefully channelled through health programs with broad remits and five-year life cycles, often repeated, to contribute more effectively to a broad range of health system strengthening activities.	
Larger programs in Solomon Islands and Vanuatu provided a higher level of support to a range of activities across all functions, while other country programs, especially the smaller ones, were more selective.	
In Kiribati and Tonga, funding support for health services, and 'other supporting activities', made up most budgets.	
All countries required some support for services and critical recurrent supplies and/or capital investment over the evaluation period.	

Finding

DFAT's contribution to the development of the Pacific health workforce through a combination of support over the past decade, was effective. DFAT has opportunities to further support Pacific island countries' workforces to meet the changing needs of its people, including by increasing focus on health promotion and illness prevention:

- » DFAT support was associated with increased numbers, qualification and management of the Pacific health workforce.
- » DFAT's investment in Pacific health workforce training institutions made the biggest contributions to health workforce development in Pacific island countries.
- » DFAT support to local training institutions through infrastructure, curricula development, faculty support and financing, enabled increased trainee numbers and quality of training.
- » Australian-funded scholarships contributed to health workforce development in the Pacific; however, there is still room for improved coordination and planning between the scholarship program and human resource priorities of respective health ministries to maximise the value of scholarships in addressing gaps in the health workforce.

Finding

DFAT has not adequately recognised the strong leadership available from Pacific people, including diaspora, and the benefits of engaging them as national or regional experts. This hinders the effectiveness of DFAT support. The Pacific expertise of locally hired DFAT staff is also underused.

Finding

DFAT successfully employed strategies for fostering technical and leadership skills and confidence, including engaging ministry and health staff in sharing and discussing relevant data and information within networks or at meetings.

Major finding

DFAT's capacity-building support would be more effective if based on systematic analysis of existing capacity and priorities of what could reasonably be expected to achieve in each country context. Technical assistance was the most commonly used approach to capacity building, but it did not always match the nature of the issue trying to be addressed. A mix of approaches that foster Pacific leadership and innovation is more likely to be effective and sustainable. More recent use of other approaches, particularly networks and meetings for data sharing to foster technical and leadership skills and confidence of Pacific ministry and health staff, were positive developments.

Recommendations

Recommendation 4

DFAT's contribution to Pacific island health systems should prioritise investment in Pacific island leaders working in ministries and health services, including clinical and managerial cadres. DFAT should do this at all levels.

DFAT should prioritise nursing cadres as they are the backbone of Pacific health systems.

Recommendation 5

DFAT should base its capacity-building investments on joint analysis of needs and priorities of what could reasonably be expected to be achieved in each country context. This means moving beyond heavy reliance on technical assistance to using a mix of approaches, including:

- » encouraging and supporting Pacific island countries to lead innovations to address health system challenges
- » making greater use of Pacific diaspora, as technical advisers for program design and evaluation.

Major finding

DFAT, appropriately, relied heavily on government health information systems, supplemented by surveys and other data collection, to monitor its programs. Even with significant investment and improvement in information systems; however, it was difficult to link program inputs to outcomes and measure their impact. This reflects deficiencies, including in qualitative evaluation, operational research and research capacity development, which need to be addressed to better understand health system and program progress. DFAT and Pacific governments need to be clearer on the purpose of M&E in programs.

Recommendations

Recommendation 3

DFAT should continue to support and use Pacific island government health information systems recognising that these systems, along with other health system building blocks, such as human resources and financing for health, are essential foundations.

DFAT should also:

- » Explore, where appropriate, a whole-ofgovernment approach to information systems (for example, human resources).
- Adopt a structured approach to investing in more analytical and research capacity within Pacific island countries.
- Evaluate its own programs by fostering co-analysis of program effectiveness and associated decision making. This should, in turn, be used to inform future investment.

Major finding

Expanding DFAT's good practices in supporting country-led priorities for strengthening health systems will require technical health, development (including an understanding of working in partner systems) and Pacific expertise. Access to technical health expertise varied considerably over the evaluation period even though it is considered critical to designing and implementing effective health programs. DFAT has also underused the expertise of locally engaged DFAT staff and did not adequately recognise the strong leadership available from Pacific people, including diaspora, as national or regional experts.

Recommendation 6

DFAT should strengthen its own technical, development and Pacific island-related capacity, and quality assure external technical health expertise provided. This is essential to supporting Pacific island partnerships and programs.

Possible mechanisms to achieve this could include:

- ensuring that all DFAT teams providing health advice and managing programs include, or have access to, health, development and Pacific island expertise, such as the skills needed to facilitate genuine partnerships
- » increasing the number and seniority of Pacific island health professionals in DFAT posts and as advisers (locally engaged or from the Pacific diaspora in Australia and in the region)
- appointing a senior Pacific island health adviser to support and mentor DFAT staff and engage Pacific island governments.

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Annex 1: Tables

This annex provides additional information relating to this evaluation in the form of a series of tables:

- 1. Population and economic characteristics of the seven Pacific island focus countries.
- 2. Australian health Official Development Assistance to the seven Pacific island focus countries, 2008–09 to 2017–18, dollars and percentages.
- 3. Number of unique investments and partners by country, type of funding and financial year, 2008–09 to 2017–18.
- 4. Description of selected focus country health programs.
- 5. Expenditure on selected, other country and regional and global health programs allocated to the seven Pacific island focus countries, 2008–09 to 2017–18.
- 6. Number of unique partners receiving Australian Official Development Assistance in selected country health programs.
- 7. Long-term international advisers in selected health programs.
- 8. Summary of increased health system performance associated with DFAT's financial and technical support, seven Pacific island focus countries, selected country investments, 2008–09 to 2017–18.
- 9. Number of health volunteers placed through Australian Volunteers Program per year, in six Pacific island focus countries, 2012–13 to 2017–18.
- 10. Number of health volunteers placed by health system function and as trainers or educators in six Pacific island countries, 2012–13 to 2017–18.
- 11. Distribution of Australian health-related scholarships to the Pacific by country and location of study, 2008 to 2017.
- 12. Summary of monitoring and evaluation frameworks and monitoring for results in the six focus countries with support through government systems.
- 13. Summary of health-related regional research investments active in the seven Pacific island focus countries, 2008–09 to 2017–18.

Annex table 1: Population and economic characteristics of the seven Pacific island focus countries

Country	2017 population estimates (in 1,000s)	Land area (sq. km)	Urban population (% of total) 2017	Gross domestic product per capita 2017 (current US\$)	Population growth (annual %) 2010–2017	Total fertility rate (2017 est)
Fiji	906	18,270	56	\$5,589	0.60%	2.6
Kiribati	118	810	53	\$1,594	1.60%	3.7
Nauru	13	21	100	\$8,845	NA	NA
Samoa	198	2,830	18	\$4,281	0.50%	4.7
Solomon Islands	637	27,990	23	\$2,132	2.40%	4.2
Tonga	102	720	23	\$3,959	-0.60%	3.2
Vanuatu	287	12,190	25	\$3,124	2.50%	3.7

Sources: Data on population and fertility for six countries: http://ghdx.healthdata.org/record/ihme-data/gbd-2017-population-and-fertility-1950-2017 No reliable fertility rate is available for Nauru given its small population. Gross domestic product per capita is from the World Bank's World Development Indicators. https://databank.worldbank.org/data/indicator/NY.GDP.PCAP.CD/1ff4a498/Popular-Indicators

Annex table 2: Australian health Official Development Assistance to the seven Pacific island focus countries, 2008–09 to 2017–18, dollars and percentages

	Expenses al	located to a Paci	fic country	Expenses to Oceania (
Fiscal year	Country level	Regional	Global	Regional	Global	Total
2008–09	\$32,173,657	\$7,174,909	\$751,880	\$16,124,465	\$1,010,468	\$57,235,377
2009–10	\$40,154,612	\$6,638,697	\$668,660	\$22,858,729	\$500,000	\$70,820,698
2010–11	\$38,193,442	\$2,390,605	\$1,471,049	\$25,100,889	\$4,837,153	\$71,993,139
2011–12	\$44,772,657	\$2,694,000	\$4,443,051	\$18,255,620	\$1,191,144	\$71,356,472
2012–13	\$50,297,885	\$5,113,423	\$4,830,893	\$21,181,894	\$1,001,311	\$82,425,406
2013–14	\$41,523,403	\$4,624,523	\$4,028,070	\$12,084,902	\$2,053,192	\$64,314,089
2014–15	\$44,583,201	\$11,124,247	\$4,991,010	\$11,208,034	\$1,921,558	\$73,828,050
2015–16	\$40,369,722	\$8,953,320	\$5,562,593	\$9,844,441	\$1,533,333	\$66,263,410
2016–17	\$37,401,748	\$8,011,517	\$5,976,107	\$10,981,441	\$2,700,000	\$65,070,813
2017–18	\$32,067,430	\$14,347,063	\$6,938,166	\$9,085,714	\$2,218,758	\$64,657,131
Total	\$401,537,757	\$71,072,304	\$39,661,479	\$156,726,129	\$18,966,917	\$687,964,586
2008–09	56.2	12.5	1.3	28.2	1.8	100
2009–10	56.7	9.4	0.9	32.3	0.7	100
2010–11	53.1	3.3	2.0	34.9	6.7	100
2011–12	62.7	3.8	6.2	25.6	1.7	100
2012–13	61.0	6.2	5.9	25.7	1.2	100
2013–14	64.6	7.2	6.3	18.8	3.2	100
2014–15	60.4	15.1	6.8	15.2	2.6	100
2015–16	60.9	13.5	8.4	14.9	2.3	100
2016–17	57.5	12.3	9.2	16.9	4.1	100
2017–18	49.6	22.2	10.7	14.1	3.4	100
Total	58.4	10.3	5.8	22.8	2.8	100

Annex table 3: Number of unique investments and partners by country, type of funding and financial year, 2008–09 to 2017–18

	Financial year											
Country and funding type	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18	Total unique investments	Total unique partners
Fiji	7	8	7	14	9	8	10	9	8	14	45	103
Country	2	3	5	3	1	1	1	2	2	3	10	17
Regional	4	3	1		1	2	5	3	2	5	16	29
Global	1	2	1	11	7	5	4	4	4	6	19	68
Kiribati	6	5	1	12	8	10	9	8	8	10	33	51
Country	3	2	1	2	2	2	2	2	3	3	8	18
Regional	3	3		1	1	5	6	4	3	5	15	26
Global				9	5	3	1	2	3	2	11	17
Nauru	7	4	1	2	2	4	6	5	4	6	17	25
Regional	4	2	1	1	1	1	2	2	2	2	6	9
Global	3	2		1	1	3	4	3	2	4	11	19
Samoa	6	5	3	12	7	12	9	6	6	8	35	55
Country	3	1	2	2	1	3	2	1	1	1	6	17
Regional	3	4	1	1	1	4	6	3	2	4	15	30
Global				9	5	5	1	2	3	3	14	20
Solomon Islands	14	12	5	17	13	11	11	9	9	8	47	141
Country	8	5	2	3	3	2	2	2	2	2	15	67
Regional	5	5	2	1	2	5	6	4	2	3	15	34
Global	1	2	1	13	8	4	4	4	5	4	19	63
Tonga	4	5	1	12	7	7	9	7	6	8	31	50
Country	1	2	1	2	1	1	3	2	1	1	5	20
Regional	3	3		1	1	3	5	3	3	5	15	24
Global				9	5	3	1	2	3	3	12	15
Vanuatu	15	14	8	16	14	11	10	9	8	9	46	137
Country	8	7	5	3	4	2	2	2	2	2	14	58
Regional	6	5	1	1	2	5	5	4	3	5	18	39
Global	1	2	2	12	8	4	3	3	3	2	15	60
All countries	37	30	21	30	23	24	27	22	21	25	104	234
Country	29	22	17	16	13	12	14	12	13	14	63	152
Regional	7	6	2	1	2	6	9	6	5	7	24	48
Global	1	2	2	13	8	6	5	5	5	6	22	72

Note: Investments do not include Direct Aid Program funds or non-health activities, or investments or partners associated only with Oceania-unspecified

activities.

Annex table 4: Description of selected focus country health programs

Name of investment	Investment number	Start date	End date	Description of program
Fiji				
Fiji Health Sector Implementation Program (FHSIP)	INF391	2002	2010	This program supported the Ministry of Health and Medical Services Fiji (MoHM) to pursue its own strategic and corporate plans. It represented the first program in the health sector where the Australian Agency for International Development (AusAID, now Department of Foreign Affairs and Trade) used an 'alliance partnering approach' to manage program activities.
				In keeping with the philosophy of the program, there was no program design document, program implementation plan or log frame. Instead, the annual operating plans for FHSIP were prepared each year to support the MoHM's own plans and were presented to the governing body, the Charter Board, for approval (including approval of the operating budget needed to achieve plans).
Fiji interim funding (FHSIP interim)	INJ667	2010	2012	This interim package of assistance to the Fiji health sector began when the previous bilateral health program ended in December 2010. This package of support was delivered through a small value procurement contract, with the FHSIP managing contractor to complete three existing sub-contracts. A direct grant was provided to the Fiji School of Medicine to fulfil commitments and complete activities that could not be finished by 31 December 2010.

Name of investment	Investment number	Start date	End date	Description of program
Fiji Health Sector Support Program (FHSSP)	INJ640	2011	2017	This program was delivered over six years. It was implemented by the same managing contractor as the FHSIP and FHSIP interim. Its five objectives were: » safe mothers » safe babies » reducing non-communicable diseases (NCDs) » strengthening primary health care » health system strengthening. It addressed key factors negatively impacting on the objectives—health workforce issues, data capture, information use, and monitoring and evaluation. The High-level Strategic Review: Fiji Health Sector Support Program—Final report (2014) (G Biscoe & C Jacobsen), recommended that FHSSP sharply focus its strategies and activities for maximum impact, value-for-money and sustainability. This included focusing the safe motherhood component on the six facilities where 85 per cent of births take place and the diabetes component on the critical gap in the continuum of care provision of clinical services for those who had undergone screening to prevent foot sepsis and amputations.
Kiribati				
Kiribati Health	INI894	2010	2020	This investment encompasses activities including the: » Kiribati National Tuberculosis Program » Towards Tuberculosis Elimination in Kiribati project » health infrastructure » Kiribati amputation prevention project » quality reviews and capacity-building support (health adviser) » Kiribati Internship Program.

Name of investment	Investment number	Start date	End date	Description of program					
Nauru									
Nauru Improved Health	INI970	2009	2019	This investment aimed to support implementation of the Department of Health's Strategic Health Plan 2010–15 and annual operational plans, to guide the implementation of the National Sustainable Development Strategy 2005–25.					
				Priorities were: » strengthening health system management, in particular budget prioritisation » strategic planning » infrastructure redevelopment statistics (noting governance and human resource) » reduced prevalence of NCDs and sexually transmitted infections through more effective preventive and public health programs and improving maternal and child health outcomes by addressing child nutrition and improving access to and quality of ante and post-natal care.					
Nauru Health Sector Support	INI207	2005	2011	This overarching memorandum of understanding stated that 'health activities will assist with shifting services toward a greater emphasis on primary health and preventative measures to place these on a more sustainable long-term footing'. Assistance for the sector provided opportunity to focus on: » sustainable primary health care initiatives, emphasising stronger local planning » better and more appropriate and suitable infrastructure » more local staff receiving external training » higher numbers of qualified staff, and better local pharmaceutical management.					

Name of investment	Investment number	Start date	End date	Description of program
Samoa				
Samoa Health Sector Initiative/SWAp and Partnerships for Development— Improved Health	INH720	2007	2017	This SWAp pooled donor resources with strong donor leadership to strengthen health systems and the Government of Samoa's ability to successfully implement the initial years of its Health Sector Plan 2008–18. The SWAp aimed to achieve this through
				predictable financing, delivered through partner government systems, coupled with technical assistance and dialogue on process and results.
				Under the health SWAp, pooled development partners included DFAT, New Zealand's Ministry of Foreign Affairs and Trade and the World Bank as joint partners, with leadership provided by the Government of Samoa.
				Development partner funds were earmarked to specific activities in the Health Sector Plan which supported three components: » health promotion and prevention » enhancement of quality health care service delivery
				 strengthening policy, monitoring and regulatory oversight of the health system. The health SWAp started in 2008 and was completed in 2017.
Samoa Health Program	INI257	2013	2022	This investment supports the implementation of the first four years of Australia's Samoa Health Investment Plan 2014–2022, developed in consultation with health sector stakeholders.
				The eight-year plan is being implemented in partnership with the Government of Samoa. It builds on previous investments in the health sector through the SWAp.
				Its three key result areas are:
				 strengthening primary and primordial prevention and service delivery
				 broader health system in the areas of human resources
				health financing and health information
				» partnerships across the health sector.

Name of investment	Investment number	Start date	End date	Description of program
Solomon Islands				
Solomon Islands HSS Phase 1 (SWAp)	INH479	2007	2012	This five-year commitment supported the Solomon Islands National Health Strategic Plan 2011–15 through sectoral budget support to the Ministry of Health and Medical Services (MHMS).
				Other development partners in the sector-wide approach to health were:
				 » Japan International Cooperation Agency (JICA) » Republic of China (ROC, Taiwan) » SPC (Pacific Community) » United Nations Population Fund (UNFPA) » United Nations Children's Fund (UNICEF) » World Bank » World Health Organization (WHO). In 2011, the European Union joined by funding rural water and sanitation (through a partnership with UNICEF). AusAID was the lead donor and only donor
				partnership with UNICEF). AusAID was the lead donor and only donor providing budget support during this period.

Name of investment	Investment number	Start date	End date	Description of program
Solomon Islands HSS Phase 2 (SWAp)	INK561	2012	2016	This second phase of the health sector support program provided sector budget support for jointly agreed strategic priorities, including health sector strengthening activities, maternal and child health, malaria and other disease control priorities.
				The second phase also provided funds to provide rural access to clean water, basic sanitation and hygiene awareness (malaria and clean water, basic sanitation and hygiene awareness activities were previously funded through separate programs).
				Other development partners in the SWAp were: » JICA » ROC (Taiwan), informally » SPC » UNFPA » UNICEF » World Bank » WHO.
				AusAID was the lead donor providing sector budget support—approximately 36 per cent of funding for the public health sector during this period. Australia worked in partnership with the Solomon Islands Government through a SWAp, which aimed to help the MHMS achieve the underlying objective of its National Health Strategic Plan 2011–15, which was to provide access to essential health services to all Solomon Islanders.

Name of investment	Investment number	Start date	End date	Description of program
Solomon Islands HSS Phase 3 (SWAp)	INL121	2016	2020	The third phase of the health sector support program is similar to HSSP2, in that it fuses budget support, performance-linked funding (PLF) and technical assistance.
				Drawing on lessons learned during HSSP2, features of HSSP3 include: » three clear themes for primary health care (preventive, promotion and curative) » health systems strengthening » support for reforms.
				The third phase also supports more focused technical assistance, with clearly identified core roles concentrating on developing and implementing plans to strengthen primary health care and its necessary support systems, including public financial management.
				Increased funding and improved rules for PLF making the link between performance and reward. PLF is increasing proportionately over the lifetime of HSSP3 so there was a 75 per cent/25 per cent split between core budget support and PLF by the final year.

Name of investment	Investment number	Start date	End date	Description of program
Tonga				
Tonga Health Sector Support Phase 1 (THSSP1)	INI960	2009	2016	This design aimed to build on the gains (capacities) made through earlier funded projects, as the basis for the MoH to manage a suite of health system improvement projects identified through the MoH's planning processes.
				Australian support was managed by the MoH and integrated into Government of Tonga's management and accountability systems to the maximum extent. Using Tonga's planning, management, procurement and implementation systems—with appropriate joint oversight—was a deliberate strategy to improve Tonga's systems by using the systems and enabling diagnosis of weaknesses that needed to be addressed.
				THSSP1 objectives of AusAID financing were to enable the MoH to: » implement its corporate plan » fund critical service delivery deficiencies » manage, use and report on AusAID funding using Government of Tonga systems, strengthening them where necessary.
Tonga Health Sector Support Phase 2 (THSSP2)	INL683	2015	2020	This investment followed on from THSSP1. Its four components are: » management of NCDs in primary care » primary and secondary prevention » health promotion related to NCD health systems strengthening » support for mental health and disability services. These components supported the goal of the MoH's corporate plan—Universal Health Coverage (UHC) in Tonga.

Name of investment	Investment number	Start date	End date	Description of program	
Vanuatu					
Vanuatu Health Sector Support 2010 to 2019	INJ348 & INJ438	2010	2019	This strategy outlined shared outcomes between Australia and the MoH. Assistance in the sector was structured around these shared outcomes, initially jointly agreed with the Government of Vanuatu through the 2010 Partnership for Development process. Annual meetings between Australia and the MoH refined these priorities. The shared outcomes were: » enhancing access to, and quality of, health care services, particularly for rural communities, including a strengthened health supply chain, strengthened community nursing, and upgraded facilities » controlling and progressively eliminating malaria » improving budgeting, financial and expenditure management » strengthening health information system to track Millennium Development Goal progress and support evidence-based decision making » reducing child mortality » improving maternal health and combat HIV/AIDS and other diseases.	

Annex table 5: Expenditure on selected, and other country and regional and global health programs allocated to the seven Pacific island focus countries, 2008–09 to 2017–18

	Selecte	ed and other he	Selected investments as % of:				
	Selected investments	Other country health programs	Regional programs allocated to a country	Global programs allocated to a country	Total spending	Total country health programs	Total health spending allocated to a country
Fiji	49,273,099	6,062,351	13,833,360	11,397,274	80,566,083	89.0	61.2
Kiribati	4,395,229	18,464,547	8,304,683	1,462,591	32,627,050	19.2	13.5
Nauru	22,622,118	12,006,074	4,186,594		38,814,786	65.3	58.3
Samoa	24,175,304	1,335,559	7,112,945	1,158,671	33,782,480	94.8	71.6
Solomon Islands	167,396,678	17,153,226	14,403,291	12,887,390	211,840,584	90.7	79.0
Tonga	18,140,363	1,274,460	9,362,987	2,474,302	31,252,112	93.4	58.0
Vanuatu	39,873,795	19,364,953	13,868,445	10,281,251	83,388,445	67.3	47.8
Total	325,876,586	75,661,171	71,072,304	39,661,479	512,271,540	81.2	63.6

Annex table 6: Number of unique partners receiving Australian Official Development Assistance in selected country health programs

Selected investments	Number of unique partners
Fiji Health Sector Improvement Program	5
Fiji Health Sector Interim Assistance	2
Fiji Health Sector Support Program	5
Kiribati Health	9
Nauru Health Sector Program	2
Nauru Improved Health	5
Health Program (Samoa)	14
Partnerships for Development—Improved Health (Samoa)	1
Samoa Health Sector Initiative	7
Solomon Islands Health Sector Support Program	18
Solomon Islands Health Sector Support—Phase 2	29
Solomon Islands Health Sector Support Program—Phase 3	11
Tonga Health Systems Support Program	15
Tonga Health Systems Support Program II	8
Vanuatu Health Sector Support 2010–19	42
Total (unique partners)	103

Annex table 7: Long-term international advisers in selected health programs

Fiji	The managing contractor had permanent staff with some technical roles and several long-term advisers, including in human resources and monitoring and evaluation. Short-term advisers were used to support many activities.
Kiribati	The Kiribati Health Program funded technical advisers through partner organisations. This included: » Motivation Australia for diabetic foot care » Pacific Community for tuberculosis control » World Health Organization for health information » Fiji National University for medical education.
Nauru	Five long-term advisers were funded in the Nauru Improved Health program. The previous country program had contracted people to fill in-line positions, including in the Secretary of Health.
Samoa	A biomedical engineer, procurement advisers, and an epidemiologist have been employed through the country program. Other technical advisers were contracted through partner institutions funded within the country program, such as Motivation Australia.
Solomon Islands	DFAT, under HSSP2, supported long-term technical advisers in core management functions including finance, planning and human resources. It also supported long-term technical advisers in areas such as: » primary health care » malaria » water and sanitation » biomedical engineering » infrastructure » supply and distribution of pharmaceutical supplies. Under HSSP3, long-term technical advisers are largely focusing on core management functions including finance, planning and human resources. The World Health Organization is contracted to provide technical advice in health service development and health information.
Tonga	The Tonga country health program shifted from many short-term advisers in HSSP1 to two long-term advisers in HSSP2.
Vanuatu	One health contract included long and short-term advisers placed within the Ministry of Health and in other places clinicians as locums in the hospital. The country program also funds United Nations agencies to provide technical advisers.

Note: This list does not include short-term advisers who provide specific support to country programs, prepare designs, conduct evaluations or provide strategic advice to posts.

Annex table 8: Summary of increased health system performance associated with DFAT's financial and technical support, seven Pacific island countries, selected country investments, 2008–09 to 2017–18

	Health services	Governance and leadership	Financial management	Health information	Inputs
Fiji	High childhood immunisation rates increased or were maintained. Skills and guidelines improved for maternal and child health and noncommunicable diseases (NCDs), including advanced life support and integrated management of childhood illness, mental health diagnosis and referral, diabetes screening and diabetic foot care. Health workforce numbers increased, and community health worker cadre revitalised, including with remuneration. Nursing training strengthened at Fiji National University. Evidence of changes in outcomes included increased proportion of women presenting in first trimester and recent declines in child and maternal mortality based on national data.	Health ministry achievements gained in monitoring and evaluation (M&E) and use of data for national and divisional planning, budgeting and decision making, workforce planning and monitoring. Clinical Service Networks improved clinical governance and leadership.	Cost-sharing plan for purchasing new vaccines led to the Ministry of Health and Medical Services funding 100% of the vaccine procurement.	Data quality from public health and patient electronic information systems improved.	New maternal and child health and hospital facilities upgraded or built, including solar powered lighting. Radios facilitated better training and supported supervision of staff in primary care facilities.

	Health services	Governance and leadership	Financial management	Health information	Inputs
Kiribati	Tuberculosis (TB) program succeeded in increasing case detection and maintaining treatment rates but did not reduce prevalence. The program, once managed by Pacific Community, was integrated into the Ministry of Health and Medical Services. Mobility services may have improved but these were not documented. The program was to introduce foot care techniques, but this did not succeed as intended; however, some techniques were introduced into the current service.	Several coordinated donor-funded initiatives indicated that support for the donor harmonisation process through the Health Information Unit was effective. Department of Foreign Affairs and Trade's support for drafting the National Health Strategic Plan assisted in prioritising actions, M&E and policy dialogue with donors.	No supported activities.	Systems or analytical capabilities did not see significant gains, but annual reports published more often with more complete reporting of causes of deaths in hospitals.	New maternity ward built in a populated area, which reduced congestion at the main hospital at the other end of the atoll. Diagnostic equipment improved TB surveillance and case management.

	Health services	Governance and leadership	Financial management	Health information	Inputs
Nauru	Despite earlier optimistic assessments of effectiveness, a 2017 review indicated that Nauru had a poor standard of hospital care and that funding had not improved community-based services.	A mid-term review, conducted in 2014, reported Nauru had a very good strategic and operational planning process. A 2017 review, however, noted that the Ministry of Health did not have an annual operating plan to reconcile with a budget.	Procurement systems established for government procurement were not adequate for pharmaceuticals.	Patient record system not functioning sufficiently to assist patient care. Little or no recording of outpatient services.	Country health programs supported approximately 40% of the operating budget of the health system, including drugs, medical supplies and payroll. Separate Australian funding repaired damage to the hospital following a 2013 fire, including replacing equipment. Senior technical advisers filled key senior roles, including as hospital administer and, for a time, Permanent Secretary.

	Health services	Governance and leadership	Financial management	Health information	Inputs
Samoa	In the first years of the sector-wide approach (SWAp), the Government of Samoa invested in extensive staff training (including on the use of equipment purchased through the SWAp), health promotion and leadership. Childhood immunisation rates (DPT3) improved. Infant and under 5 mortality rate declined. Health worker-topopulation density increased. Proportion of adults who were obese increased.	Under the SWAp, the Government of Samoa prepared policies and advocacy related to tobacco control, NCDs and health promotion. Greater efficiency in use of both human and physical resources was measured over the course of the SWAp. SWAp modality promoted better donor coordination. Early trials completed of a village-based program to improve prevention and screening of NCDs. A registration system for health professionals and other workforce development initiatives introduced. Multi-year budgets prepared to assist with prioritisation.	Health expenditure increased as percentage of government expenditure. Through the SWAp and related Australian-funded programs, capacity with the National Health Service for pharmaceutical procurement increased. Attention to management increased, including infrastructure planning and facility and equipment maintenance.		Ambitious infrastructure program for the SWAp experienced delays, including because a new hospital, financed by the Chinese Government, was being built. However, the final evaluation concluded that 'Despite delays and cost overruns, improvements for health infrastructure have been achieved and the SWAp made it possible for the health sector to replace key buildings and medical equipment to improve delivery of health care services.' Improvements included new nursing quarters, renovated hospital, new pharmaceutical warehouse, new orthotics workshops, and purchase and upgrade of priority equipment.

	Health services	Governance and leadership	Financial management	Health information	Inputs
Solomon Islands	Maternal, infant and child mortality declined. Malaria incidence declined, except in the final years. Immunisation rates increased and weekly NCD clinics were routine in every hospital. Availability of essential drugs increased and then declined. Health worker density per population increased.	Government led the way on a new Role Delineation Policy, an overarching framework for facility and workforce requirements to achieve affordable and appropriate universal health coverage. Workforce and planning devolved to provinces. Donor coordination unit established.	Government revenues for health and proportion allocated to provinces increased or maintained. Quality and timeliness of financial reporting by province improved. Recurrent budget implementation rates improved. Absorbed costs of pharmaceuticals previously supported through program.	Reporting and data quality for public health data through the Demographic and Health Survey improved. Electronic patient record system rolled out. Increased data/ reports by provincial directors and centrally for decision making.	Provincial medical stores built or upgraded.

	Health services	Governance and leadership	Financial management	Health information	Inputs
Tonga	NCD health services improved. Cadre of trained NCD nurses put in place. NCD drugs on the essential drugs list and available in most facilities. Most key heart disease and diabetes management interventions being delivered at primary care facilities. Clinical care guidelines for diabetes updated. Support for selected specialist clinicians ensured services while junior doctors coming through the pipeline. Behaviour change communication and counselling saw less progress.	Financial and technical support for initial work on primary care guidelines and workforce planning evolved to the development of a Package of Essential Health Services. With support of DFAT and other development partners, Tonga reviewed and restructured corporate services.	Increased government budget for both recurrent and development health expenditures. Support for procurement achieved through DFAT's Economic and Public Sector Reform Program, but reforms initiated slowed procurement of pharmaceuticals. Absorbed cost of NCD medicines initially supported by Australia.	Health information system capacity declined, especially with patient records and reporting.	Public health wing of Vaiola Hospital and health centres renovated, including improved access for disabled persons. Clinical equipment and related supplies and NCD drugs purchased through DFAT country programs, leading to increased capacity to deliver care.

	Health services	Governance and leadership	Financial management	Health information	Inputs
Vanuatu	Health workers- to-population density came about through DFAT support for training returning medical graduates and through access to specialised medical training and a refurbished and strengthened nursing school. Childhood immunisation rates rose quickly from 2012, from about 30% of eligible children receiving all vaccinations to more than 80% in only a few years. Malaria incidence reduced and was eliminated in two provinces.	Budgeting improved. Suite of policies and plans developed.	Vanuatu Government made budget savings through cost-effective procurement and budgeting. MoH successfully transferred staff paid through direct funding agreement to their recurrent budget. Asset and infrastructure management strengthened.	Functionality of health information improved, including through better recording, reporting and use.	Complementing the Village Health Worker program, DFAT renovated aid-posts and provided medical supply kits to remote villages. Nursing school facilities upgraded as a component of increasing the nursing workforce.

Annex table 9: Number of health volunteers placed through Australian Volunteers Program per year, in six Pacific island focus countries, 2012–13 to 2017–18

	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18*
Fiji	28	20	12	11	8	3
Kiribati	4	3	4	4	5	0
Samoa	2	0	3	5	3	2
Solomon Islands	13	9	7	20	12	0
Tonga	9	6	7	6	5	2
Vanuatu	9	9	7	12	14	3

^{*}AVID until 31 December 2017.

Annex table 10: Number of health volunteers placed by health system function and as trainers or educators in six Pacific island focus countries, 2012–13 to 2017–18

	Education and training in title*				
	Health services	Governance	Finance	Health information	
Fiji	69	11	2	0	20
Kiribati	15	5	0	0	14
Samoa	10	3	0	2	9
Solomon Islands	51	8	2	0	32
Tonga	20	8	4	3	8
Vanuatu	38	14	2	0	19

 $Note: As \ volunteers \ work \ across \ financial \ years, \ adding \ financial \ years \ together \ (as \ in \ the \ lower \ panel) \ results \ in \ double-counting.$

^{*}Volunteers with education and training in their title are also included under health system function.

Annex table 11: Distribution of Australian health-related scholarships to the Pacific by country and location of study, 2008 to 2017

	Total by country and location	Vanuatu (Tonga	Solomon 1 Islands	Samoa (Nauru	Kiribati	Fiji	Location Aust	Field
90	5	0	1		0	0	0	ω	Australia Pa	Doctor
	85	11	23	13	14	0	7	17	Pacific Aus	
27	15	0	0	8	4	0	0	ω	Australia Pa	Nurse
	12	5	5	0	0	2	0	0	Pacific Au	
23	2	0	0	2	0	0	0	0	Australia P	Dentist
	21	4	12	2	0		0	2	Pacific Au	
84	40		ω	11	7	0	ω	15	Australia P	Allied health
	4	16	12	&	ω	2	ω	0	Pacific Au	Ē
68	34	Vi	Vi	8	Vi	0	4	7	Australia F	Public healt
	34	4	0	13	5		4	7	Pacific A	alth
11	7	0	<u></u>		<u> </u>		0	ω	Australia	Administration/ health planning
	4	0	0	0	ω	0	0		Pacific A	ntion/
7	И	0	0		0	0	0	4	Australia	Other
	2	0	0	0	2	0	0	0	Pacific	-
	310	46	62	68	44	7	21	62	Country totals	

Annex table 12: Summary of monitoring and evaluation frameworks and monitoring for results in the six focus countries with support through government systems

Country	Summary of M&E frameworks, country capacity and use of health information by DFAT
Kiribati	The Tuberculosis (TB) component of the Kiribati Health program used the national TB indicators for M&E. An independent review of the program uncovered data quality issues that impacted on the usefulness of the indicators for TB control efforts.
	DFAT is providing some ongoing support through a short-term adviser to strengthen the capacity of the Health Information Unit, including improved reporting and cause of death data. The unit uses the ministry's annual report to review progress.
Nauru	Program investments did not have an M&E framework, and DFAT monitored performance in consultation with ministry officials, technical advisers and strategic reviews undertaken in 2014 and 2017.
	The health information system is poor, having never recovered from the 2013 hospital fire. Provision of technical assistance to support identifying strategies to improve it have not yet resulted in positive change.
Samoa	The SWAp had key performance indicators, although in most cases there were no targets. Many indicators relied on the Demographic and Health Survey (2009 and 2014) and national STEPS survey (2002 and 2013) results.
	The current program has a draft M&E framework—not yet implemented. Individual program components, such as the twinning arrangements with Queensland Health and the support to the Samoa Family Health Association, have been evaluated.
	DFAT's support for health information systems were reviews of the costs and benefits of different approaches to electronic patient record systems.
Solomon Islands	The Health Ministry's core indicator set is the basis of an M&E framework developed with support from the World Health Organization and aligned with the Healthy Islands monitoring framework.
	Indicators are published annually. As the case studies in this evaluation report indicate, support for improved health information has been accelerated through multiple uses for planning, budgeting, managing and reporting in the ministry and provincial health departments.
	DFAT refers only to the performance-linked funding indicators when preparing annual aid quality checks.
Tonga	The first Tonga Health Systems Support Program (THSSP) did not have an M&E framework but THSSP2 does.
	The THSSP M&E framework was widely believed to be unworkable and was pared back the following year to rely almost exclusively on health ministry indicators. However, because of the state of Tonga's patient and public health records systems, the indicators needed to be calculated manually.
	Although baseline measures were produced during the revision of the M&E framework, they were not available for most indicators at the time of THSSP's 2 mid-term evaluation. This evaluation also noted there were no indicators for measuring performance of some of the supported activities.
	As described in the Tonga case study, DFAT has not provided large, consistent financial and technical support to improve health information systems in Tonga.
Vanuatu	The Vanuatu Health Program did not have a design or M&E framework. In 2017, an interim framework was developed with several health outcome measures to monitor the direct funding agreement program with the Government of Vanuatu.
	DFAT has provided substantial support for health information and this appears to be producing useful quality information on primary care service quality and coverage, although often on specific public health programs such as immunisation and maternal health.
	DFAT uses reports included in annual aid quality checks to demonstrate the association between areas of DFAT support and improved health services and health outcomes.

Annex table 13: Summary of health-related regional research investments active in the seven Pacific island focus countries, 2008-09 to 2017-18

Investment name and date	Description				
Knowledge Hubs for Health, 2008 to 2013	Four hubs based at Australian universities and research institutions were established to expand the knowledge base for health development in the Pacific.				
	The 2013 Knowledge Hubs for Health: Final Evaluation report reflected that while the hubs were successful in expanding the knowledge base relevant for health systems, strategies for knowledge translation were poorly developed. ⁹⁴				
	Furthermore, the Australian Agency for International Development (AusAID, now the Department of Foreign Affairs and Trade), at posts and in Canberra, were not as engaged in the work as would be required if there was a closer link between Australian programming and evidence.				
	The program did not have a capacity-building strategy for Pacific individuals and institutions, although most built capacity through short courses (often delivered with external partners), scholarships and visiting fellowships.				
Pacific Malaria Initiative— regional research, 2007 to 2014	Malaria research was conducted, supported in Solomon Islands and Vanuatu and implemented by the University of Queensland.				
Small research fund as part of Vanuatu's Governance for Growth, 2007 to 2013	A small research fund supported studies into public perceptions of the public service, among other activities, through a national think tank and the University of Sydney.				
Australian Development Research Awards Scheme,	The awards scheme provided research grants for 129 development research projects. Approximately one-third of the projects focused on the Pacific, and some on health.				
2007 to 2016	A study undertaken by the Research for Development Impact Network examined how the research contributed to development outcomes. It found that in the sample, health-related Australian Development Research Awards research appeared to have the most frequent contribution to outcomes.				
	The study highlighted several examples of research projects contributing to outcomes in the Pacific. These included:				
	 a project focused on changing taxation policy (to reduce palm oil use and increase consumption of fruit and vegetables) adoption of guidance materials on public law review in the Pacific improved access to health-related evidence in Fiji included in courses at the Fiji School of Medicine improved knowledge exchange and research translation in Fiji.⁹⁵ 				
Tropical Disease Research Regional Collaboration Initiative, 2016–17 to	This initiative supported research collaboration between Australia, regional and international research institutions on tropical diseases that posed a trans-boundary threat in Southeast Asia and the Pacific for two years.				
2018–19	The Pacific component included specific vector-borne disease research and a research mentoring program for Pacific health workers from selected countries, including Solomon Islands.				
Stronger Systems for Health Security Applied Research,	These grants were for investigator-driven development research in Asia and Pacific, in partnership with national organisations.				
2017 to 2020	The only grant for work in the Pacific outside of Papua New Guinea was awarded to the University of Sydney for developing and testing mobile surveillance tools for water-borne diseases in Fiji.				

⁹⁴ G Schierhout (2013). Knowledge Hubs for Health: Final Evaluation, Health Resource Facility, Canberra. Internal DFAT document.

⁹⁵ Research for Development Impact Network (2017). From evidence to impact: Development contributions of Australian aid funded research. Study based on research undertaken through the Australian Development Research Awards Scheme 2007–2016.

Annex 2: Methodology

This annex details the methods used to conduct this evaluation. It expands on Chapter 2 of this evaluation report.

Evaluation purpose and questions

This evaluation is primarily a tool for Department of Foreign Affairs and Trade (DFAT) learning. It combines description and analysis of past country health programs to explore:

- » what was funded
- » if it was effective
- » how DFAT's ways of working contributed to or constrained investment effectiveness.

This information is used to identify what practices and approaches DFAT should adopt in partnership with Pacific governments and people.

In broad terms, the evaluation asked two overarching questions:

- 1. 'What worked to support Pacific island countries to strengthen their health systems?'
- 2. 'How can we do better?'

Answers to this set of key evaluation questions informed the response to the overarching questions:

- 1. What health programs were funded by DFAT in the seven Pacific island countries?
- 2. What were the key characteristics of DFAT's major country health programs' for strengthening health systems?
- 3. Have DFAT's major country health programs contributed to strengthening health systems?
- 4. Which ways of working by DFAT have helped or hindered strengthening health systems?
- 5. How can DFAT enhance the contribution of its health programs in the Pacific?

Consultation and review processes

The evaluation plan and report incorporated feedback from the Evaluation Reference Group, Independent Evaluation Committee, Office of Development Effectiveness (ODE) and Specialist Health Service.

Official Development Assistance expenditures database

The data set provided by DFAT included all investments with health-related expenditures between 2008–09 and 2017–18 for eight Pacific island countries, including Papua New Guinea (PNG).

Expenses were broken into 'activity' as per the Organisation for Economic Co-operation and Development Assistance Committee (DAC) codes, and fund recipient; that is, the entity with the contract or agreement with DFAT and not necessarily the organisation ultimately responsible for implementation. The country of benefit is also indicated.

Specifically, the data set had 23 variables. Table 14 shows the variables and how they were used for the analysis in Chapter 3, including relevant exclusion and inclusion criteria.

Annex table 14: Variables in DFAT's database of health Official Development Assistance expenses

Investment	DFAT's internal unique identifier for investments				
Investment name	Current investment name.				
Investment public description	Investment description provided for purpose of external communication.				
Investment start date	The evaluation included all investments that ended after 2008–09 and started by 2017–18.				
Investment end date					
Investment status					
Activity	An internally generated code, not related to type of activity.				
Activity name	Variable level of detail related to expenses.				
Activity description					
Activity start date	The focus of the evaluation was on the investment. The evaluation did not use dates for activities, which may refer to the length of agreement with the organisation				
Activity end date	receiving funds.				
Program	Refers to the areas within DFAT responsible for the investment, not used in the evaluation.				
Fund code	Internal DFAT code. Activities related to all codes used in the evaluation except Direct Aid Program (DA1), which is a small grants scheme administered by DFAT through Australia's diplomatic posts in developing partner countries.				
Program fund name	Internal DFAT designation; not used in the evaluation.				
Country regional or global grouping	Refers to the origins of the funding through country-level funding envelope, regional investments specific to the Pacific, or DFAT's global programs.				
Partner category	Thirteen codes for DFAT's partner, including recipient government, commercial contractors, Australian and foreign based non-government organisations, academic institutions, Australian government departments (including DFAT) and multilateral organisations.				
Partner	Name of the specific partner, such as Pacific Government, United Nations agency or contracting company.				
Country	This is the country of benefit. Not all funds designated to the country are spent in country. The parts of regional and global programs not allocated to a country are classified as 'Oceania unspecified'.				
Health sector or not	Investments can have non-health related activities alongside health activities. Funding figures used in the evaluation only reflect health sector expenses.				
Sector	DAC code for development-related areas of support.				
Sector name	DAC descriptor for development-related areas of support.				
Financial year	Year in which expenses occurred.				
Expense	In Australian dollars.				

Selected country investments

The database revealed 155 investments operating over the evaluation period in eight Pacific island countries, including PNG. After excluding PNG, total investments reduced to 104, with 63 country-level health investments.

The 15 investments selected for this evaluation were chosen because they were large, multi-year investments that included implicit or explicit health system strengthening objectives and had independent evaluations or reviews available.

Table 15 explains the selection rationale for each country.

Annex table 15: Selection rationale for each country

Country (total number of country programs)	Selected health programs	Rationale			
Fiji (10)	Fiji Health Sector Improvement Program	This series of investments represented 89 per cent of country health programming over the evaluation period.			
	Fiji Health Sector Interim Assistance	A new health program started in the final year but did not yet have an independent evaluation.			
	Fiji Health Sector Support Program				
Kiribati (8) Kiribati Health		The other large country programs either had limited health expenditure over the evaluation period or their objective was to facilitate skilled migration and not strengthen the Kiribati health system.			
Nauru (6)	Nauru Health Sector Program Nauru Improved Health	Other investments were for major infrastructure works and to contract individual advisers.			
Samoa (6)	Samoa Health Sector Initiative Partnerships for Development— Improved Health Health Program (Samoa)	Other investments had very limited health sector activities.			
Solomon Islands (15)	Solomon Islands Health Sector Support Program Solomon Islands Health Sector Support Program 2 Solomon Islands Health Sector Support Program 3	This series of investments constituted 91 per cent of all country health programming over the evaluation period.			

Country (total number of country programs)	Selected health programs	Rationale
Tonga (5)	Tonga Health Systems Support Program Tonga Health Systems Support Program II	The two phases represent 94 per cent of all health expenditure through country programs.
Vanuatu (14)	Vanuatu Health Sector Support	Excluded programs were: 1. a program to eradicate malaria 2. support for village health workers 3. support for a local non-government organisation to provide training and services.

Document analysis

Document analysis is a systematic procedure for reviewing or evaluating documents. It involves finding, selecting, appraising (making sense of) and synthesising data contained in documents.96

DFAT documents are an important data source for addressing broad evaluation questions. Investment design documents, annual quality checks, independent evaluations and reviews are the official record of investment intent, activities, funding and other implementation modalities, effectiveness and impact. The documents describe, from the point of view of DFAT and its consultants, the:

- » strengthens and weaknesses of Pacific island government health systems
- rationale for health investments
- successes and failures of health investments
- explanations for those outcomes.

In a context in which key players in DFAT, Pacific island governments and multilateral and regional organisations change regularly, documents offer one of the few means of examining change over the 10-year evaluation period. Furthermore, compared to interviews and other forms of qualitative data collection, documents are 'stable'.97 Their content is not subject to the views or skills of the researcher and findings can always be verified or revised by returning to the same documents.

A DFAT officer compiled the documents using the department's knowledge management system. If documents were missing, such as a design document or evaluation, the officer asked DFAT posts for the additional material.

This study used two methods to analyse the documents:

- 1. Content analysis, which involves organising text in documents into categories related to the research question. It was used to describe what was funded and what activities were reported to be effective.
- 2. Thematic analysis, which explored the relationship between activities, ways of working and their effectiveness.

Documents related to the selected country programs (177 in total), along with notes from key informant interviews and consolidated notes from the case studies, were imported into NVivo 12, a widely used qualitative data analysis software package which allows investigators to tag sections of text with key words representing codes or concepts. This coding is used to manage the information and to explore:

- frequency of concepts mentioned
- differences between countries, investments or sources
- relationships between concepts.

To delve into what DFAT funded and the characteristics of the major country investments, the evaluation team used four health system functions categories developed to classify donor investments to global health funds.98 These are outlined in Table 16.

⁹⁶ GA Bowen (2009). 'Document analysis as a qualitative research method', Qualitative Research Journal, vol. 9, no. 2, 2009.

⁹⁸ G Shakarishvili, MA Lansant & V Mitta, et al. 'Health system strengthening: a common classification and framework for investment analysis', Health Policy and Planning, 2011, 26:316-26, doi:10.1093/heapol/czq053

Annex table 16: Classification of supported activities under the four health system functions

Health system functions	Supported activities and elements				
Governance and	Budgeting and planning				
leadership	Policy and strategy development and review (includes monitoring and evaluation)				
	Workforce planning and management Leadership development				
	Governance processes				
	Project and program management				
Heath services	Community engagement and health promotion				
	Community health workers				
	Drug and technology supply chain management				
	Health workforce development (pre-service and in-service)				
	Quality and coverage of health services				
Financial management	Management of financial systems				
	Asset and infrastructure planning and management				
	Financial accountability				
	Human resources for finance				
	Payments				
	Procurement				
	Funds pooling				
Health information	Health information systems (patient and public health)				
	Population and facilities surveys and surveillance				
	Human resources for health information, monitoring and evaluation, and research				

The initial categorisation of supported activities to the four health system functions was refined to reflect the types of activities DFAT supported over the evaluation period. Using a distinction proposed by Chee et al. between strengthening the institutions and interdependence of functions and supporting the recurrent operations of the health system, Australian-funded health system inputs were coded separately as 'supporting' activities.⁹⁹ These included in-line positions to cover staff shortages¹⁰⁰, buildings, equipment, purchase of vaccines and drugs, and funds directed to urgent needs such as natural disaster responses.

Other coding of text related to:

- » Capacity development activities: international and national technical advisers; Australian volunteers; scholarships; and twinning.
- Ways of working for DFAT: DFAT capabilities; implementation issues including choice of modalities; use of performance-linked payments; designs and M&E; coherence and donor harmonisation; partnerships with Pacific governments; and policy alignment.
- » Effectiveness, efficiency and sustainability.

⁹⁹ G Chee, N Pielemeier, A Lion & C Connor. 'Why differentiating between health system support and health system strengthening is needed', *International Journal of Health Planning and Management*, 2013, vol. 28, no. 1, pp. 85–94.

¹⁰⁰ If the text indicates that a position had a capacity development function, it was coded under the relevant health system function, such as health workforce development under Health Services or procurement under Financial Management.

To investigate whether DFAT's contributions to country efforts to strengthen health systems were effective, text related to the effectiveness of financial and technical support (positive, negative, mixed, or no outcome measures available) were coded.

Following an analysis workshop on findings from the country visits about DFAT's ways of working, the documents were reviewed again to code emerging concepts of what helps and hinders effective contributions by DFAT.

Limitations of the documents as an information source

An analysis of DFAT documentation is only one source of information used for this evaluation. It provides an outwardly focused DFAT view of country health system strengths and weaknesses, the nature and extent of the activities, and their relevance, effectiveness, efficiency, sustainability and impact. Most documents (excepting AQCs (formerly QAIs) and FAQCs) reviewed are in the public domain; none were classified.

The types of documents varied from scoping studies and concept notes, to designs, reviews, evaluations and annual assessments of progress. All types of documents were useful in describing activities.

Designs were very helpful, but often lacked detail. Furthermore, activities changed as the investment was implemented. Evaluations and progress reports had their own biases, but it was hard to determine the nature of any bias. There may have been a tendency to highlight activities that were effective, but equally there was often in-depth discussions about activities not implemented as planned or that did not result in an expected outcome or impact.

It was a challenge, especially in reviews and evaluations, to distinguish between what *should* be an investment activity and what *was* an investment activity. Especially in the large, multi-year programs and in the sector-wide programs supported through ear-marked budget support to the recipient country, the activities supported were not explicitly spelled out in the documents, although discussions and agreements between DFAT officers and government representatives took place. The activities had to be implied from retrospective statements in reviews, evaluations and annual assessments.

The collection of documents reflects what DFAT has stored. In general, detailed budgets, memorandum of understanding, and program-generated documents by implementing partners were not available centrally.

The documents were not a good source of information for how investments aligned with other programs and funding sources. Most adhered closely to the issues related to the investments under consideration. They contained mentions of the contribution of other donors, the recipient governments and other Australian aid investments (bilateral, regional and global), but this was not systematic.

These limitations are common to all document analysis. For example, a study of United Nation's (UN) involvement in global health, based in part on official documents, noted:

The limitations of using official organisational documents are that these tend to contain insufficient detail to inform the research questions, be biased towards presenting the work of the organisation in positive light, and incompletely reflect the views and contributions of the organisation on the issues studied.¹⁰¹

A potential advantage of document analysis is that it offers a cumulative description of activities over time. But this historical perspective is tempered by the fact that political contexts and authors change. It was not uncommon for the assessment of effectiveness and even the content of activities to change overtime. In some cases, those were real changes and in other cases they were the result of different perspectives or priorities.

These limitations do not mean that DFAT documents are not a valuable information source. Their expression of DFAT's view of Australian-funded bilateral health investments are an important 'social artefact' that can tell a great deal about intentions and results of health system strengthening, as long as they are interpreted with their limitations in mind.

¹⁰¹ G Unni, N Watts, A Lefebvre, A Cheung, S. Hoffman & JA Røttingen (2018). 'Global governance and the broader determinants of health: A comparative case study of United Nations Development Programme's and World Trade Organization's engagement with global health', Global Public Health, DOI: 10.1080/17441692.2018.1476567

Limitations of the activities coding scheme as an analytical tool

Validity and reliability are ongoing challenges with qualitative research, which includes the analysis of documents.¹⁰² This evaluation initially used two coders who coded and recoded each other's work and regularly discussed definitions and approaches.

The revisions were organic, resulting in a refinement of the classification system, so inter-coder reliability cannot be measured. However, this was labour intensive and subsequent coding was done by only one evaluator who regularly reviewed her own work. Despite the reliability challenges, the advantage of coding electronically is that the findings are transparent, they can be challenged, verified and revised.

Lessons learned on methodology

Coding nearly 200 documents is very labour intensive. Although the use of word searches can provide some quality assurance it does not substitute for reading documents many times. Tools, such as automatic coding available in later versions of NVIVO, are not useful for documents with many different formats. Documents with common structures, such as quality at implementation reports and aid quality checks, were stored as images, pdfs and different forms of word templates, making it impossible to use them consistently.

Key informant interviews and focus group discussions

Thirty-four selected DFAT staff (in Canberra and at post and including former staff) and other development partners were interviewed individually or in small groups to gain a better understanding of the:

- » drivers of bilateral health investment choices and DFAT's engagement with, and influencing of, these drivers
- » enablers and challenges (specific to DFAT, but also external) influencing the effectiveness of investments during design and implementation
- » extent to which the associated lessons are disseminated and used to improve investments
- » factors impeding the uptake of these lessons.

Verbatim accounts of the interviews were made and then synthesised using a common framework.

Country visits and case studies

Five evaluation team members participated in the country visits. Two went to all three countries, two to two countries and one to one country.

Case study topics were selected on preliminary document analysis of health systems strengthening activities supported by DFAT funding and technical advice in most country countries:

- health information system and patient records (not surveys or other types of gathering techniques)
- » health workforce development to enhance access to, and the supply of, health services
- » pharmaceutical distribution and supply chain management, not procurement
- » strategic health financing, focusing on financial planning, prioritisation and allocation of health funding/budget, rather than public finance management.

After reviewing the information collected, the team decided there was not enough detail concerning strategic health financing to present as a case study.

The case studies focused on both investment implementation and results in different contexts and how the effectiveness and sustainability of DFAT's support in the selected thematic areas were influenced by factors specific to the country and DFAT approaches. Case study findings enabled the evaluation team to contrast and compare across countries to identify what has worked well and less well at different times in different contexts, and why.

Key informants were selected from:

- » partner governments (mainly ministries of health)
- » DFAT staff (Australian and locally engaged staff)
- » implementing partners
- » technical advisers
- other development partners, principally from UN agencies.

102 E Welsh (2002). 'Dealing with data: using Nvivo in the qualitative data analysis process', Forum: Qualitative Social Research, 3(2).

Focus groups were conducted with clinical directors, nurse leaders and others. The evaluation team also visited health facilities, including the main referral hospital, one or two clinics in capital cities, and facilities in decentralised settings (for example, district hospitals, clinics, health centres and nurse posts) to gain a better understanding of how:

- health services and systems operate and function at different levels
- » this changed over the evaluation period.

In total, 156 people were interviewed or participated in focus groups across the three countries.

Interviews and focus groups were conducted using an interview guide of these six open-ended questions:

- 1. What major changes occurred in the country's health system over the last 10 years (generally)? What has changed over the last 10 years in the areas of support included in case studies?
 - What effect did this have on other areas of the health system?
 - How did this enable the government of [country] to better meet the health needs of its people?
- 2. How did Australia's support contribute to this?
- 3. What worked well? (Probes explored 'contextual engagement', ways of working, modalities and implementing arrangements.)

- 4. During the period 2008 to 2017, is there a time when Australia's support contributed particularly well to this change?
 - Why do you believe this worked well?
- 5. What are the three most important things that should be done to strengthen these areas further? (This question is not only about 'hard' investments as such, but also includes ways of working, modalities and implementing arrangements.)
 - How do you think DFAT could (best) contribute
- 6. What needs to happen (or change) for DFAT to make the best possible contribution it can?

While interviews focused on the four case study topics, views on all aspects of DFAT programming and engagement were welcomed and noted.

The purpose of the evaluation and assurances of anonymity proceeded a request for verbal consent to participation.

Team members discussed their findings during the visit and prepared individual notes. The notes were consolidated in a matrix organised by themes to facilitate analysis across case study and country.

Annex 3: Case studies

This annex includes case studies of the functions of three health systems and Australia's contributions (through DFAT) to them in Fiji, Solomon Islands and Tonga.

The case studies illustrate a wide diversity of contributions to supporting change processes in these areas. They cover aspects of:

- » health information systems
- » workforce development
- » pharmaceutical distribution and supply chain management.

These three functions were selected because they were present in investments over the past decade in most of the seven focus countries as well as in the three countries visited.

This annex provides more detail of what changes have occurred in the three areas, the nature of Australia's contributions and what factors have helped or hindered changes in the evaluation period.

The case studies draw on documents, insights from interviews and observations during visits to the three countries. They summarise what improved over the evaluation period and how Australian-supported actions made a positive contribution to improved performance.

While each case study includes key elements of Australian support for changes achieved by each country, many other factors influence progress, primarily countries' own efforts and support from a wide range of other development partners and networks.

Case study one: Health information systems

What are health information systems and why are they important?

- » Health information includes hospital patient records, health data reported by community-based facilities, population surveys, surveillance, analytical work and research.
- » Health information systems are used to collect, collate, communicate and analyse data from various sources.
- » Contemporary health information systems use technologybased software, require data entry training, staff, management and, often, specialist technological support.
- » Data from health information systems is essential to inform evidence-based leadership, management and policy decisions, for example about resource allocations, policies and plans for all aspects of health systems.
- » Health information is also critical for monitoring all types of changes over time (such as patterns of disease and staff workloads) to ensure health systems remain relevant and effective.
- » Effectiveness in strengthening health information includes continuous improvements in recording, reporting and use of data.

What has changed in three Pacific island countries and how has Australia's support contributed?

Changes in Fiji's health information system

Before 2008, Fiji used a paper-based Public Health Information System (PHIS). While efforts were made to roll-out a Patient Information System (PATIS), a lack of telecommunications infrastructure limited success. National population-based surveys were undertaken but aggregated results not used for decision making. Between 2008 and late 2012, health information activity gained momentum and improvements were made. PHIS was redesigned as a web-based interface and reporting became more frequent.

Health information improvements were identified as a priority in the Ministry of Health and Medical Services' (MoHM) 2016–17 Corporate Plan. This included a budget for 'evidence-based policy, planning, implementation and assessment' and activities to develop standards and improve consistency of national health data and statistics. These were regarded as a 'game changer', enabling enhanced collection and use of health information.

In 2018, PATISPlus was operating relatively well as a complete in-patient system, integrating all facilities and laboratory results. It was not issue free, however, with some regarding it as not fully functional. Its limited storage capacity has also recently been raised with the Department of Foreign Affairs and Trade (DFAT) as an issue.

Fiji is now undertaking evidence-based planning and management with its health information system data. MoHM's Health Information Unit has a national Resource Network with trained staff supporting planning processes and delivery of data across 45 work units. In 2018, the evaluation team saw information products, including maps and graphs, produced using the health information system to assist health managers.

Contributions from Australia to Fiji's health information system

Australian support of health information system development in Fiji for the past 20 years is acknowledged as an important factor in positive progress. Australian support has contributed to transforming the patient health record systems, including funding the latest and most successful move to the tablet-based PHIS. One informant said Australia was willing to take the risk on investing in technology at a time Fiji was not in a position to do so.

The Fiji Health Sector Support Program (FHSSP) (2011–16) introduced a more whole-of-system strategic approach to health information compared with previous phases, supporting PATISPlus and PHIS. This included:

- » identifying clear outcomes, providing a 'line of sight' between Australia's support and expected health information system improvements
- » strengthening health information activities, along with monitoring and evaluation (M&E) capacity and workforce development, which were so successful FHSSP invested more heavily in this area than was planned in the original budget¹⁰³

- » incentivising better compilation and use of data and funding, through small activities, to cover MoHM staff transport costs, materials and supplies for the health information system, M&E training workshops and supervision visits
- » encouraging the use of facility audits and infrastructure scoping exercises, leading FHSSP to support changes required in the first five facilities and undertake an audit for maternal and child health centres, while MoHM funded changes in the other facilities.

Changes in Solomon Islands' health information system

In 2013, Solomon Islands' previous efforts to develop and use a health information system began to bear fruit. A backlog of paper-based records was entered, the District Health Information System (DHIS) rolled out to three provinces and the Ministry of Health and Medical Services (MHMS) developed a core indicator set aligned with the National Health Strategic Plan.

By 2014, nine of 10 provincial health offices had dedicated staff to enter data into the DHIS from the facility monthly reports. Data from donor-funded programs were absorbed into annual core indicator set reports. Data covered health issues such as: tuberculosis, eye care, non-communicable diseases (NCDs), human immunodeficiency virus, malaria and reproductive health.

Armed with this new information, provincial offices began using health information system data for annual operating plans and to examine facility-level results for service use and disease patterns. This helped expand the capacity of provincial offices.

By 2018, when the evaluation team visited Solomon Islands, provincial health directors gave examples of using data for motivating staff teams and allocating resources to improve service delivery and advocacy. The team also witnessed the positive use of the health information system data at all levels of the health service. Overall, progress has been remarkable, but it has taken a lot of work over a long period. One health worker observed there has been 'continuous tweaking over 10 years in response to new systems, new information requirements and interests and indicators and learning from experience.'

¹⁰³ A Chattoe-Brown & S Majid (2016). Fiji Health Sector Support Program: End of Program Evaluation, Final Report. https://www.dfat.gov.au/sites/default/files/fiji-health-sector-support-program-final-evaluation.pdf

The current health information system is strong and includes multiple feedback loops from facilities to provinces and back, and between provinces and central office. Continuous improvement and support are required to ensure relevance and usefulness. Efforts include annual planning meetings and biennial nurse meetings relying on data collated in the DHIS. Annual awards are presented for the best-performing province based on DHIS reports. Efforts are undertaken at provincial level to strengthen decentralisation and service delivery at local levels. Information produced by the DHIS facilitated the new Role Delineation Policy and will be a foundation for its implementation (Case study 2).

Rising demand for information is a sign of health information system usefulness but causing concern about the ability of the Health Information Unit to manage.

A hospital-based patient information system has not developed at the same pace as the DHIS. Strengthening this, within broader service improvements at the national hospital, is now a priority.

Contributions from Australia to Solomon Islands' health information system

Australia's support contributed to strengthening the health information system in the last decade, including through technical advisers, volunteers and access to World Health Organization and World Bank expertise.

- » The Health Sector Support—Phase 3 (HSSP3) program funds locally employed health information system staff at national level; however, these positions are yet to be transferred to the MHMS payroll because of a public service-wide freeze on new positions.
 - Support for training of provincial office staff and facility-based nurses in computer skills and data management through HSSP3.
 - Performance-linked funding (in HSSP3) rewards timely reports and plans within the health information system, resulting in healthy competition between provinces.
- » Other country-level, regional and global programs, which have contributed to strengthening health information, including scholarships for master's degrees in epidemiology, public health, health economics and health policy.

» The innovationXchange has contributed to the strengthened collection and availability of civil registration and vital statistics, including the use of verbal autopsies to improve cause-of-death data for deaths occurring in the community through the Data for Health Initiative.

Changes in Tonga's health information system

Tonga's current system for recording, reporting and using health information is reported to have 'scope for improvement'. Tonga produced annual reports based on public health and clinical data from 2000 to 2011, then not again until it produced a 2016 report. At the time of this evaluation, no 2017 report had been produced. The Ministry of Health (MoH) is now prioritising improvements to the quality of health information and this is included in the corporate plan.

A 2016 assessment found processes in place for recording data at health facilities and Vaiola Hospital in the capital, but data were not being routinely collected, processed or used in monitoring and strengthening the health system.¹⁰⁴

Strong clinical leadership has contributed to some areas of positive performance. Examples:

- » a network of reproductive health nurses at health centres keeps good records and maintains family cards with key information; records are aggregated and used to inform nurses' annual meetings
- » doctors and hospital administrators, struggling with a hospital information system introduced in 2002, manually produce needed information
- » national diabetes clinic and NCD nurses maintain registers to record new and ongoing cases and follow-up, used to produce annual reports, but they do not include trend data.

At Vaiola Hospital and three smaller hospitals, admissions and discharges are not yet coded consistently, making it difficult to generate data on NCD incidence. The system has some limitations related to indicators, data and records. The absence of standard operating procedures and other issues means reporting depends on individual efforts.

¹⁰⁴ DFAT (2016). Tonga Health Systems Support Program—Phase 2 Monitoring and Evaluation Framework: A Review, Specialist Health Service. Internal DFAT document.

Since 2016, the Tongan Government's Fanafana Ola project has used the Tupaia platform for electronic collection, reporting and feedback of data for primary health care. 105 This started with data collected by reproductive health nurses. This system was used to report damage to health facilities within 72 hours of Cyclone Gita. 106

Contributions from Australia to Tonga's health information system

Australia's support has not had a strong focus on strengthening health information in Tonga.

- The Tonga Health Systems Support Program—Phase 1 (THSSP1) (2009–2015) design included ambitious plans to strengthen the health information system, including electronic systems, but early efforts to implement these initiatives were not successful.
 - Support was provided to the MoH to adopt the hospital information system used by St John of God Hospital in Ballarat, Australia, with which the MoH has a long-standing partnership. However, the system did not suit Tonga due to connectivity and information and communication technology issues.
- » THSSP2 is focused on primary care and NCD prevention and management and does not include support for hospital information systems.
- Country programs have supported research related to NCD prevention and the 2011 census.
- » innovationXchange supports the Tuapia platform in Tonga, and other Pacific island countries.
- » Australian scholarships for post-graduate studies in epidemiology, public health, health economics, health services management and health policy have helped to expand capacity in producing and using health information within MoH.

Factors that have helped or hindered the development of the health information system

Factors that helped	Factors that hindered
National government and clinical leadership	Poor choice of technology
Strategic approach	Lack of infrastructure and ongoing support
Continuity of support, based on continuous learning and adaptive contributions	Challenges associated with maintaining continuous support for improving the health information system
Appropriate mix of contributions to national systems including technical assistance, performance-linked funding, equipment, staff and training, as well as scholarships in health information-related topics	
Calculated risk on new technology	
Operational support	
Expanding human resources	
Links to divisional and provincial planning processes	
Effective coordination with and contributions to regional programs as well as collaboration with other development partners	

¹⁰⁵ Tupaia is a health data aggregation, analysis and visualisation platform that synchronises information in real-time from multiple sources across six Pacific island countries to map health systems. The platform is funded through DFAT's innovationXchange program.

¹⁰⁶ Beyond Essentials (2018). Tupaia Phase 1 Final report (March 2017 to June 2018). innovationXchange. Internal DFAT document and confirmed by a senior ministry official.

Case study two: Health workforce development

What is health workforce development and why is it important?

- » All health services need sufficient workforce numbers located where services need to be delivered.
- » Health and medical personnel need to have the appropriate mix of skills and a system for continuous updating and strengthening of skills to respond to emerging health issues, incorporate new ways of preventing and treating illness, and replace departing personnel.
- » The health workforce needs continuous strengthening, and this requires planning to maintain a country's service delivery model and match population size, geography and disease burden.
- » Appropriate entry qualifications need to be considered, including how to extend the skills of health workers so they can safely deliver essential health services and be retained in the workforce.
- » Clinical and managerial leadership need continuous strengthening to address new challenges, bring about major reforms and maximise global and regional partnerships.
- » Health workforce management needs to be comprehensive to ensure the workforce remains able to respond and manage the complexity of health services. This includes setting and supporting workplace values, codes of conduct, job descriptions and performance reviews, workforce planning, integrated training, and policies and procedures for payroll, discipline, retirement and safety.

What has changed in three Pacific island countries and how has Australia contributed?

What has changed in Fiji's health workforce development?

In the past decade, Fiji has significantly strengthened its health workforce and its resources for developing its workforce in future. The number of filled:

- » medical posts increased from 337 to 542¹⁰⁷
- » nursing posts increased from 1,784 to 2,496 (Ministry of Health and Medical Services (MoHM) 2008 and 2016 annual reports).

This takes the 'health worker-to-1,000 population' ratio from 2.5 to 3.9, helping Fiji to almost reach the new minimum health worker density ratio set by the World Health Organization (WHO) of 4.45 skilled workers to 1,000 population, to obtain coverage of essential services outlined in the SDGs.¹⁰⁸

The Fiji National University now offers Fijians (and other Pacific students) undergraduate and post graduate courses in medicine, nursing, dentistry, physiotherapy and medical imaging among others. The School of Nursing now offers both a diploma and a Bachelor of Nursing.

MoMH's Workforce Development Unit now conducts an annual strategic workforce planning process in collaboration with all other units of its Corporate Services Division. The unit is responsible for maintaining a human resources' manual and human resources' database. Through better documentation of staff needs, and by using a staff workload tool, MoHM has successfully advocated for an additional 1,000 nurses to be added to the permanent staff over five years and for an additional 93 allied and technical posts.

¹⁰⁷ DFAT understands that this figure has subsequently been increased. It has been reported (verbally) that the number of doctors is now up to 800, surpassing WHO's minimum standard of 1 doctor to 1,000 people.

¹⁰⁸ In 2006, WHO identified a minimum health worker density of 2.3 skilled health workers (physicians, nurses and midwives) per 1,000 population as necessary to attain high coverage of skilled birth attendance as a surrogate for basic needs. In 2016, WHO published a new threshold of 4.45 skilled health workers per 1,000 population to obtain coverage of essential services as outlined in the SDGs. This number is to be considered indicative and is not appropriate for subnational population or microstates. WHO, Health Workforce Requirements for Universal Health Coverage and the Sustainable Development Goals, 2016, Geneva. https://apps.who.int/iris/bitstream/handle/10665/250330/9789241511407-;jsessionid=1B2B5CC47701B6A70C044A59BB9E0238?sequence=1

Contributions from Australia to Fiji's health workforce development

Australia has contributed over the evaluation period to workforce development in Fiji.

- » Support for Fiji's School of Nursing in curriculum development, building renovations and providing training equipment, including computers:
 - 11 lecturers were trained to master's degree level
 - a new basic training curriculum for nurses was introduced
 - other courses were introduced or are being planned to increase a specialised nursing workforce.
- » Support for the Fiji School of Medicine before and after its merger with Fiji National University, including for the medical school to be involved in the clinical supervision of post-graduate students and registrars from Fiji and elsewhere in the Pacific.
- » Support for MoHM to strengthen a network of around 1,500 community health workers¹⁰⁹ nationally, who:
 - are a point of contact between communities and the health care system, especially in remote and hard-to-reach areas
 - now receive a small monthly salary from MoHM,
 giving recognition and sustainability to their role.
- » Through the Fiji Health Sector Support Program (FHSSP), the development of the Fiji health workforce plan which underpinned cabinet decisions to increase the health workforce.¹¹⁰ An adviser provided support to develop the human resources' manual and human resources' database, and more integrated approaches to training and succession planning.¹¹¹
- » An example of well-regarded Australian responsiveness occurred when the Government of Fiji introduced an 'over 55 decree' in 2009, which lowered the retirement age in the public sector to 55 years, with serious consequences for the clinical workforce. Australia moved quickly by introducing a series of training for 49 new middle-level managers, as well as proposing a three-year contracting model.

» Support for long-term strengthening of clinical, public health and management skills through funding for university-level scholarships for 62 Fijians between 2008 and 2017.

What has changed in Solomon Islands' health workforce development?

Solomon Islands has made significant strides in increasing the size and skill mix of its workforce and strengthening in-service training. The ratio of doctors and nurses per 1,000 population rose from 1.9 in 2012 to 2.2 in 2016, due to a near doubling of the number of doctors and a 25 per cent increase in nurses. However, the ratio is still lower than WHO's minimum threshold of 2.3 for basic needs of 80 per cent of the population based on skilled birth attendance. Also, MHMS employees are not distributed equitably: 84 per cent of doctors and 53 per cent of nurses are based in Honiara, mostly at the national referral hospital, and some provinces have very low health worker-to-population ratios.

MHMS faces challenges in filling vacancies and increasing its workforce given public service commission-wide limitations.

Many Solomon Islanders have taken opportunities to study medicine overseas, in established schools in Fiji, PNG and Samoa, as well as, in Cuba, the Philippines and Taiwan. Due to the increased number of graduates from different medical training institutions, the Ministry through the Medical Dental Board has strengthened the registration pathway for the purpose of quality assurance and meeting expected professional standards.

A new policy on the registration pathway for new graduates was introduced. For medical graduates from established Medical Schools (Fiji, PNG and Samoa), it means that upon return they should be absorbed into an Internship Program. For graduates from other medical schools (Cuba, the Philippines and Taiwan), it means that they will be enrolled in a bridging program for 12 months before internship. The bridging and internship programs have been established as the pathway for registration.

The evaluation team was told, however, that not all graduates will be absorbed in these new programs, and not all will be able to register to practice in Solomon Islands.

¹⁰⁹ http://www.fiji.gov.fj/Media-Center/Speeches/HON-PM-BAINIMARAMA-SPEECH-AT-SIGNING-OF-MEMORANDUM.aspx

¹¹⁰ Wiseman, et al., 2017, 'Measuring inequalities in the distribution of the Fiji Health Workforce', International Journal for Equity in Health. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5493125/

¹¹¹ A Chattoe-Brown & S Majid, Fiji Health Sector Support Program: End of Program Evaluation, Final Report, June 2016. https://www.dfat.gov.au/sites/default/files/fiji-health-sector-support-program-final-evaluation.pdf

¹¹² World Bank, Spend Better: Solomon Islands Health Financing Assessment, Washington DC, 2018.

The School of Nursing at Solomon Islands National University has recently increased its intake of nursing students to more than 100 annually to meet local and regional demand. It has also expanded advanced course offerings for in-service training to meet demands for specialists' services and organisational shifts. The other two nursing schools—Atoifi School of Nursing and Helena Goldie Hospital College of Nursing—are enrolling students at a minimum rate of 20 to 30 annually. In general, in-service training has become more readily available over the last decade, including for workers in provinces and managers.

Contributions from Australia to Solomon Islands' health workforce development

Australian funding has contributed to improvements in the health workforce:

- » Budget support and technical assistance within the two most recent bilateral Health Sector Support Programs, HSSP2 and HSSP3:
 - provided for early analytical work which underpinned decisions related to future numbers and distribution of doctors and nurses
 - budget support was used to expand the extent and nature of available training and support the development of provincial health management teams
 - national workforce management capacity was expanded through advice provided by a long-term technical adviser in human resources.
- » Support for the Solomon Islands Graduate Internship and Supervision Support Project has contributed to strengthening the workforce.
- » Through the Australian Volunteer Program placements capacity has been supplemented at MHMS and Solomon Islands National University School of Nursing.
- » Long-term strengthening of clinical, public health and management skills through funding for university-level scholarships for 68 Solomon Islanders between 2008 and 2017.

» Policy influence to encourage stronger workforce planning and management, including by setting specific workforce management indicators as part of the performance-linked funding. These indicators included timely filling of MHMS positions that fell vacant, completing organisational restructuring and gaining cabinet endorsement of the Role Delineation Policy. While targets for these indicators were not completely met (in part because they took longer than anticipated, but largely because key decision making rested outside MHMS control), some funding was still provided.

What has changed in Tonga's health workforce development?

Tonga has achieved steady growth in the number of health workers and in strengthening nurse training in particular. MoH annual reports specify increases from 59 doctors and 346 nurses in 2008 to 71 doctors and 454 nurses in 2016. This translates as an increase from 4.0 to 4.8 in the ratio of health workers-to-1,000 population, slightly higher than the indicative WHO minimum threshold for delivering SDG essential services, including non-communicable disease (NCD) prevention and control.

Several other changes have occurred including:

- » The Tongan Nursing Division has reviewed its regulatory board and strengthened continuous professional development and its performance management system.
- » The National Diabetes Centre conducts regular outreach, supported by a new cadre of NCD nurses, which has been absorbed into permanent positions.
- » Health sector management and governance have been strengthened by filling long-standing vacancies in management positions.
- » A restructured corporate services division has updated job descriptions and a competency framework.

As part of the implementation of the Package of Essential Health Services, the roles and scope of practice for community-based nurses is evolving to a more integrated primary care service supplemented by regular outreach and medical oversight. A Health Workforce Development Plan was produced in 2018.

Contributions from Australia to Tonga's health workforce development

Australia has supported gains in a stronger health workforce in various ways.

- » The most direct support was providing salaries for medical specialists who would not otherwise be available:
 - A 2012 review found these specialists perform procedures and contribute to capacity by strengthening teams and mentoring other clinicians. 113
 - A 2017 report found these specialists were the sole senior practitioners in their specialities and that, in most cases, it will be many years before the pipeline of Tongan registrars will be ready to replace them.¹¹⁴
- Support for specialised training of the first cohort of 20 NCD nurses who graduated in 2014, along with the renovation and equipping of NCD clinics at health care centres, and the purchasing of vehicles for outreach:
 - MoH has absorbed the nurse graduate positions into the workforce and is using the experience to further develop its primary care model.
 - NCD nurses attached to health care centres have been introduced, which has reportedly reduced the number of diabetes patients seen at Vaiola Hospital, the main referral hospital, and is enabling earlier discharge of NCD patients from the hospital because NCD nurses can provide follow-up care.
- » Enabling the Queen Salote Institute of Nursing and Allied Health to offer training for midwives and post-basic nurse training. The institute is offering further training for NCD care and will soon introduce a Bachelor of Nursing degree, with support from the University of Sydney.
- » Australian scholarships, between 2008 and 2017, were awarded to 62 Tongans for university level health courses, including 24 for medicine.
- Support for MoH and Vaiola Hospital's twinning program with St John of God Hospital in Ballarat. One feature is regular placements of Tongan health workers in Ballarat to experience different ways of working and strengthen practice.

- Funding a corporate service review with SPC (the Pacific Community) and WHO in 2016, which informed a major MoH restructure:
 - A long-term adviser supported the development of a corporate services competency framework and the Health Workforce Development Plan.
- » A regional program has supported the World Bank to contribute to costing of the new Package of Essential Health Services.

Factors that have helped or hindered health workforce development

Factors that helped	Factors that hindered
National government leadership	Challenges in managing steady flow of returning overseas-trained medical graduates, not necessarily linked to workforce planning
Strategic approach, integrating training and workforce planning with national strategies, including in decentralisation	
Continuity of support, based on continuous learning and adaptive contributions	
Appropriate mix of contributions to national and regional education systems including technical assistance, funding for staff and training, as well as scholarships in medical and health specialisations	
Effective coordination with and contributions to regional programs as well as collaboration with other development partners	

¹¹³ DFAT. Internal Quality Reporting System.

¹¹⁴ DFAT (2017). Review of the Critical Staff Deficiencies Component of the Tonga Health Systems Support Program—Phase 2, Specialist Health Service. Internal DFAT document.

Case study three: Pharmaceutical distribution and supply chain management

What are pharmaceutical distribution and supply chain management and why are they important?

Although some envision a supply chain to be a set of warehouses, trucks and carton boxes, a supply chain is in fact the ecosystem of organizations, people, technology, activities, information, and resources that have to come together to ensure the delivery of the product from the point where it is manufactured to the end-patient in a cost-effective way.¹¹⁵

The distribution of pharmaceuticals from a central medical store or warehouse to health facilities is critical for health services, particularly in highly disbursed populations.

A key outcome indicator of the quality of supply chains is adequate stock levels of essential medicines at facilities. Underlying this indicator is a complex system with multiple parts.

Strengthening supply chains should engage all other parts of the health system including:

- » planning and budgeting for current and future needs
- » procurement
- » clinical service models
- » lists of essential drugs which are compatible with packages of services available
- » job descriptions, entry qualifications, routine in-service training and supportive supervision of staff.

What has changed in three Pacific island countries and how has Australia contributed?

Changes in Fiji's pharmaceutical distribution system

Over the evaluation period, availability of essential drugs at hospitals and health centres has been a long-standing challenge, although there have been periods when the system seemed to be improving.

A 2008 situational assessment of the Fiji health system noted 'the often-poor availability of essential drugs was frequently presented as a significant problem that contributed to sub-optimal patient care and to patient dissatisfaction and frustration with the system.'

The FHSIP's 2010 Independent Completion Report, however, stated stock-outs are now uncommon at all levels. 116

The system has since deteriorated. The Ministry of Health and Medical Services (MoHM) 2016 annual report cited regular stock-outs or shortages of drugs in large hospitals and rural Western and Northern divisions.

The Fiji Pharmaceutical and Biomedical Services Centre (FPBSC) is responsible for forecasting, procuring, managing and distributing drugs and other medical supplies and biomedical equipment. The FPBSC Strategic Plan 2013–18 stated that stock-outs were a problem, arising from inaccurate inventory control and/or the absence of capacity to maintain accurate inventory control and communicate information. The continuing stock-outs and general shortages of drugs and supplies and equipment have been demoralising for health care workers and are reportedly inflaming public dissatisfaction with the government health system.^{117,118}

Annex Table 17: Solomon Islands' availability of critical and essential medicines

	2010	2011	2012	2013	2014	2015	2016	2017
National medical store (31 Dec)		88%	82%	94%	98%	98%	98%	90%
Primary health care facilities	53%	57%	64%	65%	73%	74%	82%	72%

Source: Statistical Health Core Indicator Report, Solomon Islands, MHMS, 2017.

¹¹⁵ Y Prashantv (2015), 'Health product supply chains in developing countries: diagnosis of the root causes of underperformance and an agenda for reform', Health Systems & Reform, 2015,1:2, 142–154, DOI: 10.4161/23288604.2014.968005

¹¹⁶ Fiji Health Sector Improvement Program (FHSIP) Independent Completion Report (2010), AusAID/HRF, page ii; https://dfat.gov.au/about-us/publications/Pages/fiji-health-sector-improvement-program-independent-completion-report.aspx

¹¹⁷ DFAT (2008). A Situational Analysis of the Fiji Health Sector, December 2008. Internal DFAT document.

¹¹⁸ J Walker & BB Chaar, et al. 'Medicine shortages in Fiji: a qualitative exploration of stakeholders' views', PLOS One, 2017, 12(6): e0178429. https://doi.org/10.1371/journal.pone.0178429

Fiji National University's Faculty of Pharmacy teaches a large number of students, many of whom will work in the private sector. The FPBSC strategic plan notes that the Public Service Commission allocates enough pharmacist roles for its needs, but that more staff are needed in related roles. The FPBSC struggles to manage an adequate and structured on-the-job training program and growth in the private health sector is resulting in pharmacists leaving the government system in search of higher wages.

Contributions from Australia to Fiji's pharmaceuticals distribution system

Australia's country health programs were involved in pharmaceutical distribution before and during the early period of this evaluation:

- » Informants told the evaluation team that Epicor, the electronic inventory system introduced in Fiji in 2002 with Australian support, is still being used for inventory and requisitions; however, licence fees have lapsed, an outdated version of the software is being used and few people are familiar with the system.
- » The FHSIP's independent progress review in 2008 noted that pharmaceutical services are now improving and stock outs are occurring less frequently. It also mentioned that 'the program made a significant investment in this area in its early stages with few visible positive results', confirming that a long-term investment is appropriate.¹¹⁹
- » After this area of work was prioritised in 2009–10, the HFSIP's independent completion report in 2010 noted that the work to improve the Fiji Pharmaceutical Services Store (FPSS) is at last paying off and the team heard very positive comments that drug stock outs are now rare at all levels and in one case a doctor commented that 'The system is now better than I have ever known.'120
- » Although further support to pharmaceutical distribution was considered, it was not included in the next program of Australian support.

- » MoHM conducted its own assessment and in 2013 sought tenders for a new system, with the Fiji Health Sector Support Program (FHSSP) reporting it could not support it and there was very little subsequent activity support by Australia.
- » One Fijian received an Australian Scholarship for a Master's in Clinical Pharmacy (2013).

Changes in Solomon Islands' pharmaceutical distribution system

The availability of essential medicines increased in Solomon Islands over the evaluation period. Table 17 shows that availability of critical and essential medicines at the national medical stores reached 98 per cent in 2014 and 82 per cent at primary care facilities, only to decline in 2017. According to key informants interviewed, stocks fell further in 2018. The evaluation team was told that changes in the MHMS drug procurement policy, coinciding with cessation of technical adviser support, contributed to disruptions in supply and distribution.

mSupply, a mobile electronic inventory system, was introduced in 2013 and was seen as a milestone. In 2014, Solomon Islands became the first country to trial mSupply mobile, which operates from smart devices.

While mSupply was considered to have contributed to improved performance in drug availability, an analysis in 2017 concluded there was still room for improvement, especially distribution between provincial stores and facilities.¹²¹

Information technology was not the only driver of availability of essential medicines. A trial of the mSupply mobile system in Solomon Islands health clinics found no difference in drug availability or rational use of drugs in clinics served by second-level medical stores using a mobile electronic inventory system compared to clinics served by stores using a paper-based system. This could be because many clinics and nurse aide posts still need to manually deliver their drug orders to provincial stores. However, there may be other advantages to an electronic system, such as accuracy, timeliness and time savings. These systems will be part of any further improvements to increase drug availability in primary care facilities.

¹¹⁹ R Sutton (2008). Fiji Health Sector Improvement Program, independent progress review. Internal DFAT document.

¹²⁰ P Freeman & R Sutton (2010). Fiji Health Sector Improvement Program (FHSIP) Independent Completion Report, AusAID/HRF https://www.oecd.org/countries/fiii/48473802.pdf

¹²¹ C Burkot & K Gilbert (2017). 'Reducing malaria in Solomon Islands: lessons for effective aid,' Development Policy Centre Discussion Paper #64, Crawford School of Public Policy, Australian National University, Canberra.

¹²² MJ Nunan. 'Beyond the Essential Medicines List: Improving Access to Essential Medicines at the Primary Healthcare Level in Solomon Islands through the Implementation of Mobile Electronic Inventory'. PhD Thesis, University of Melbourne, January 2018.

Contributions from Australia to pharmaceutical distribution in Solomon Islands

Australian aid to Solomon Islands has contributed to overall improvements in pharmaceutical distribution and supply chain management.

- » Under the Health Sector Support—Phase 1 (HSSP1), which ended in 2011–12, 50 per cent of health funding to the Solomon Islands Government was allocated to essential medicines and equipment:
 - complementary activities included support for constructing several provincial second-level medical stores, training nurses in stock management, and putting in place a long-term technical adviser and local accounts officer for the National Medical Store
 - an independent completion report noted that 88 per cent of 'critical items' were available across provinces.
- » Through HSSP2, funding allocated to the purchase of essential medicines was scaled back, but technical assistance continued and the introduction of mSupply was supported.
 - The independent completion report for HSSP2 (2016) identified improvements in the availability of drugs at provincial level, stating this was a major achievement and that pharmaceutical distribution systems were 'potentially sustainable'.¹²³
- » The design of HSSP3 anticipated a gradual reduction of Australian funding for essential medicines to zero by 2020. The design saw continued need for a technical adviser in pharmaceutical distribution, but it was not one of the nominated core positions.
 - When the incumbent pharmacy adviser left in mid-2017, she was not replaced.
- » Investments in developing the pharmaceutical workforce:
 - 2017 and 2018, the development of a Diploma Course in Pharmacy Practice, which will be offered at the Solomon Islands National University from 2019 for provincial medical stores management
 - Australia's scholarship programs supported two Solomon Islanders to complete a Bachelor of Pharmacy (2009), two to complete a Bachelor with Honours (2015 and 2017) and one to complete a Master's in Clinical Pharmacy (2013).

Changes in Tonga's pharmaceuticals distribution system

The availability of NCD medications improved over the evaluation period.

Tonga's Central Pharmacy is responsible for managing the pharmaceutical supply chain, including distribution to all health facilities. As a relatively small country with 75 per cent of the population living on the main island of Tongatapu, everyone in Tonga is believed to be able to access health services within one hour on foot.

Availability of essential drugs appears to be good, however the Central Pharmacy does not report on stock-outs at health centres or hospitals. It is supposed to report on its own stock-outs, reflecting the degree to which essential drugs are available in the country. Their target is to have 90 per cent of essential drugs in stock at any time, however this is not routinely reported. Tonga uses mSupply along with a paper-based bin system to manage stock levels.

The government's health priority is to manage the increasing non-communicable disease (NCD) burden. Having the right mix of essential NCD drugs available is critical, and the percentage of these drugs available is an indicator in the Tonga Health Systems Support Program—Phase 2 (THSSP2) Monitoring and Evaluation Framework. The baseline in June 2016 was 91 per cent. A survey of health facilities' capacity to provide NCD services, as part of the THSSP2-supported Package of Essential Health Services, found adequate supplies of diabetes and heart disease medicines at all facilities except in the remote Niuas islands. The survey highlighted the need for more attention to chronic obstructive pulmonary disease and that the stock of relevant drugs was inadequate.

Tonga's most pressing challenge for pharmaceutical distribution is to strengthen current forecasting and procurement processes to meet the high and increasing demand for NCD drugs.

¹²³ P Thompson & A Drexler (2015). Independent completion evaluation of Australia's contribution to the Solomon Islands Health Sector Support Program, Mott MacDonald. https://dfat.gov.au/about-us/publications/Pages/independent-completion-report-to-the-solomon-islands-health-sector-support-program.aspx

Contributions from Australia to Tonga's pharmaceutical distribution system

Australian funding through THSSP1 and THSSP2 has focused on NCD medications and made a significant contribution to enabling the relatively high level of availability:

- » THSSP1 funds were used to purchase drugs which had not been available before because of their cost and the country's lack of attention to NCD care.
- Since THSSP1, the Tonga Government has continued to purchase these new drugs, resulting in the current high level of availability.
- Before the development of the Package of Essential Health Services, support was provided for two studies in Tonga between 2014 and 2017, one detailing the supply chain management for drugs and another the actual and projected costs of drugs and medical supplies predominantly used for NCDs.
- Funding for a regional study, including Tonga, on the feasibility of alternative models for strengthening procurement and pharmacovigilance (quality use and regulation of medicines). This body of work informs the government's policy discussions and the Package of Essential Health Services development.
- » Support has also contributed to the pharmacy workforce.
 - The Australian scholarships program supported one Tongan to complete a Bachelor of Pharmacy (2014) and by 2016 Tonga had four pharmacists and 10 Assistant Pharmacist Diploma holders. 124
 - A key informant recalled that over the last five or six years, five pharmacists deployed through the Australian Volunteers Program had worked at the Central Pharmacy, describing their roles as 'providing support and some capacity development, filling specific gaps, doing training and leaving helpful recommendations.' At least two of these volunteers (between 2012 and 2014) were Pharmacy Trainers, upskilling new and existing staff.

Factors that have helped or hindered

Factors that helped	Factors that hindered		
Government leadership	Uncoordinated and parallel systems for purchasing, distribution, reporting and training for drugs and supplies		
Long-term ongoing support including a mix of contributions such as advisers, volunteers, research, support for planning and scholarships	Challenges associated with coordination across between health and other sectors (for example, finance, customs, public service wide procurement)		
Integration of pharmaceutical supplies with other elements within the health system	Challenges with maintaining continuous support		

