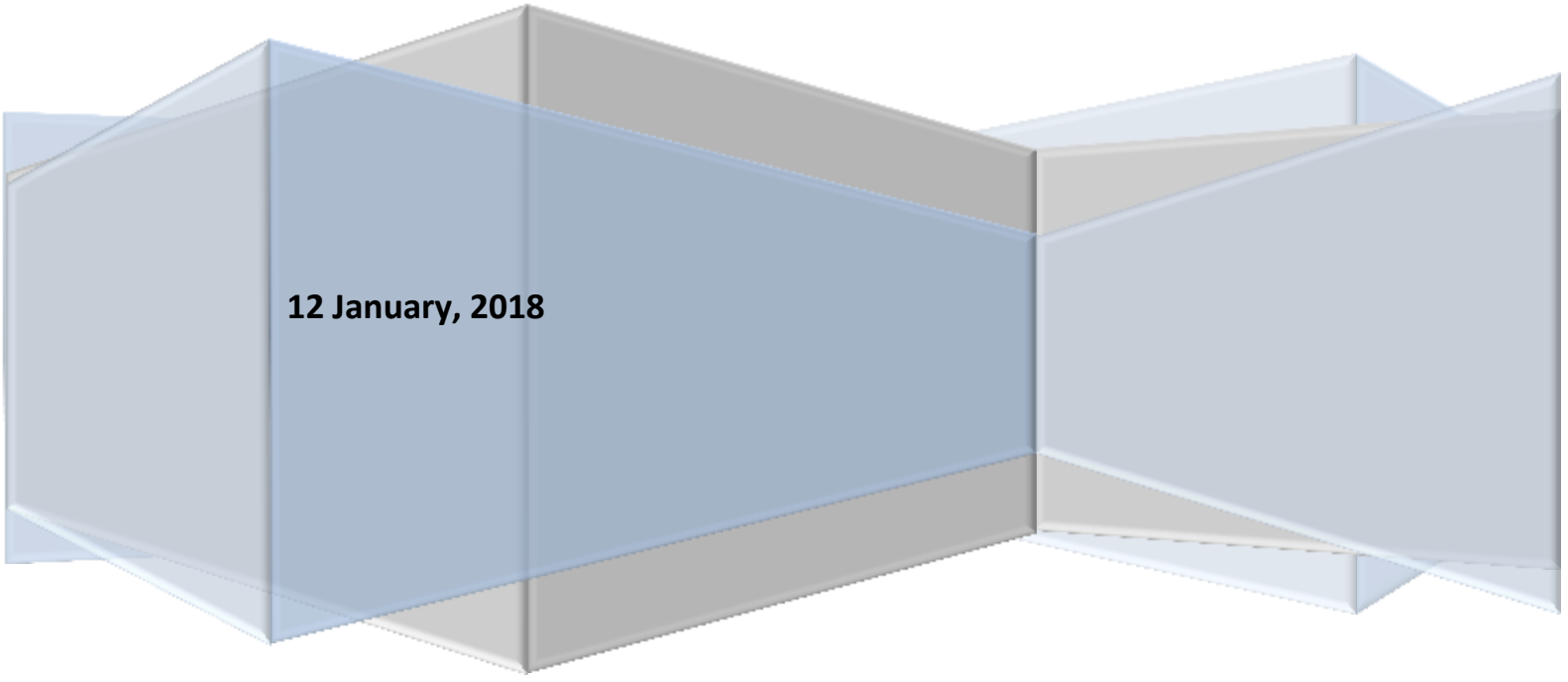
Pacific Regional Clinical Services and Workforce Improvement Program, Pacific Community, Suva, Fiji

REPORT ON A PACIFIC ISLAND COUNTRY CONSULTATION ON ENT AND AUDIOLOGY SERVICES HELD IN NADI, FIJI ON 27-28 NOVEMBER 2017

Scoping Study for Strengthening Ear Health Training Programs and ENT Services in the Pacific

Dr Rob Condon, Consultant Public Health Physician



12 January, 2018

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Executive Summary

The Pacific Regional Clinical Services and Workforce Improvement Program (PRCSWIP), managed by the Pacific Community (SPC), convened an ear, nose and throat (ENT) consultation in Nadi, Fiji on 27-28 November 2017. Pacific Island countries (PIC) attending the meeting included Fiji, Samoa, Solomon Islands, Tonga and Vanuatu.

The purpose of the meeting was to review the current status of ENT and audiology services in participating countries, to review the draft 2015 medium-term *Regional Plan for Strengthening ENT and Audiology Services in the Pacific* and, where possible, to make recommendations on how to improve the Plan's feasibility and prioritisation to support its implementation. The meeting followed a scoping visit to Vanuatu and Kiribati (reported separately).

Countries presented information on: their known prevalence of ENT-related disease and patterns of consultation; challenges related to prevention, screening, diagnosis, treatment and rehabilitative approaches; facilities for service delivery for ENT conditions and hearing loss at national, sub-national and primary health care (PHC) facilities; the specialised medical and nursing work force, training and accreditation; and the current status of their national hearing and ear health strategies and multi-sectoral coordinating committees.

In group discussion, country delegates identified the following issues that still needed to be addressed in the revised *Regional Plan*:

- Low prioritisation of hearing loss and ear health by PIC governments and development partners in the absence of strong regional leadership and clear, costed national ear health strategies
- Lack of clear or reliable access to resources, and limited sustainability of current investments
- Lack of community and health worker awareness of ear health and hearing loss
- Lack of integration of clinical and support services through effective referral pathways
- Absence of recognised training programs for PHC and specialised nurses (despite the abundance of training materials available in countries), and difficulty accessing appropriate placements for surgeons
- Poor availability of rehabilitative services like hearing aids, speech pathology and training in sign language
- The need to reconvene and reinvigorate the Pacific Regional ENT Advisory Group (PENTAG)

Subsequent discussion with external experts and clinical advisers reinforced many of the messages emerging from the country consultations, particularly relating to training and skill transfer. Additional issues and priorities arising from those discussions included:

- The need to plan and ensure resources for clinical outreach and audiology services
- The need to review and revise Essential Drug and Equipment Lists to better align with the observed spectrum of disease

- The evolving role of visiting teams from routine service provision to focusing on more complex procedures and capacity development
- Opportunities for networking and partnerships in support of operational research, especially at the community level

Based on discussions at the meeting, the *Regional Plan* has been updated and is attached at Annex 5.

The three initial priorities identified by countries are to:

1. Undertake analysis of available data, to develop a better understanding of the national burden and spectrum of disease and hearing loss
2. Convene a national multi-sectoral ENT and hearing loss coordinating committee or task force
3. Develop a costed national *ENT and Audiology Service Delivery Plan* or *Strategy*

Additional recommendations to SPC for technical assistance included: to establish a regional ENT Hub and communications network; to assist with alignment and convergence of the various national training programs and curricula; and to reconvene and reinvigorate PENTAG.

The PRCSWIP will now develop submissions for the Pacific Directors of Clinical Services and Heads of Health (HOH) meetings in 2018, drawing on the recommendations of the meeting and the revised prioritisation within the regional *Plan*, including how best to implement it and what further background work might be needed to strengthen clinical ENT and Head & Neck surgery, accredited training for ear health nurses and nurse-audiologists, community based screening and other interventions and audiological services in the Pacific.

Subject to the advice of the HOH meeting, SPC agreed to reconvene PENTAG around October 2018 to review initial progress at the national level and for regional functions under the revised *Plan*, and to prepare for a possible paper for the Pacific Health Ministers' Meeting in 2019.

Acronyms and abbreviations

CMNHS	College of Medicine, Nursing and Health Sciences (FNU)
CSOM	Chronic secretory otitis media
DCS	Director of Clinical Services
EDL	Essential Drugs List
ENT	Ear, Nose and Throat
FNU	Fiji National University
H&N	Head and Neck
HOH	Heads of Health (PIC MOHs)
MOH	Ministry of Health
NGO	Non-government organisation
NPH	Northern Provincial Hospital, Luganville, Vanuatu
OPD	Outpatients Department
PENTAG	Pacific ENT Advisory Group
PHC	Primary health care
PIC	Pacific Island country
PIP	Pacific Islands Project (RACS)
PRCSWIP	Pacific Regional Clinical Services and Workforce Improvement Program
RACS	Royal Australasian College of Surgeons
SCSN	School for Children with Special Needs (Kiribati)
SPC	Pacific Community
SSCSiP	Strengthening Specialised Clinical Services in the Pacific
TCH	Tungaru Central Hospital, Tarawa, Kiribati
TOT	Training of trainers
VCH	Vila Central Hospital, Port Vila, Vanuatu

Acknowledgements

SPC thanks the Vanuatu Ministry of Health (MOH) and the Kiribati Ministry of Health and Medical Services for supporting the country scoping visits, and for very productive discussions and opportunities to observe activities in the Ear, Nose and Throat (ENT) clinics and Outpatient departments of the facilities visited. In particular, SPC commends the work of Vanuatu MOH managers, department heads, staff of the Vila Central Hospital and Northern Provincial Hospital ENT Clinics and their partners from visiting Royal Australasian College of Surgeons Pacific Islands Project teams for their efforts to develop and implement training programs for ENT nurses and to improve ear health and ENT services in Vanuatu.

Thanks also to the ENT clinicians from Fiji, Samoa, Solomon Islands, Tonga and Vanuatu who participated in the Nadi meeting, and PIP and other technical specialists consulted by phone and email after the meeting. Their thoughtful discussion and inputs have enabled the draft regional Plan to be updated to reflect current implementation realities in the Pacific.

The Nadi meeting was convened by Dr Berlin Kafoa of the Pacific Regional Clinical Services and Workforce Improvement Program at SPC. He was assisted by Dr Rob Condon, consultant Public Health Physician (who undertook the country scoping visits to Vanuatu and Kiribati, and also compiled this report) and Ms Avikali Tila of SPC.

Introduction

The Clinical Services and Health Workforce Improvement Program

The Pacific Regional Clinical Services and Workforce Improvement Program (PRCSWIP) is an Australian funded initiative that aims to support and strengthen the quality of health services and health worker training and education in the Pacific, and to foster collaboration between Pacific Island countries (PIC) in addressing clinical and health workforce priorities in the region.

It brings together three partners with experience in developing and strengthening health programs, training health professionals and delivering specialised clinical services in the Pacific:

- the Public Health Division of the Pacific Community (SPC);
- the Fiji National University (FNU) College of Medicine, Nursing and Health Sciences (CMNHS); and
- the Royal Australasian College of Surgeons (RACS).

The PRCSWIP continues work begun under the former Strengthening Specialised Clinical Services in the Pacific (SSCSiP) program at FNU.

Burden of ENT disease and hearing impairment in the Pacific

Untreated ear conditions and hearing impairment have a recognised association with poor educational achievement and negative social outcomes. However, due to its perceived non-emergency nature, chronic hearing impairment is often overlooked as a public health and development problem – including in the Pacific.

Individuals with hearing loss are more likely to experience depression due to factors like social isolation,[1] and have earlier onset of age-related cognitive decline and higher rates of dementia.[2] Chronic secretory otitis media (CSOM) is recognised as a disease of poverty, linked to poor social determinants of health like overcrowding, poor nutrition and inadequate access to health services.[3] In other resource limited settings, studies have also identified that a high proportion (up to 90%) of prisoners in custodial settings have hearing impairment,[4] and that this is associated with a history of previous ear infections, diabetes and chronic hepatitis B infection (all of which are prevalent in the Pacific).[5]

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[1] Li C-M, Zhang X, Hoffman HJ, et al. Hearing impairment associated with depression in US adults: National Health and Nutrition Examination Survey 2005-2010. *JAMA Otolaryngol Head Neck Surg* 2014;140(4):293-302. doi:10.1001/jamaoto.2014.42 (accessed 21 December 2017)

[2] Wayne RV, Johnsrude IS. A review of causal mechanisms underlying the link between age-related hearing loss and cognitive decline. *Ageing Res Rev* 2015; 23(B):154-166. Doi:10.1016/j.arr.2015.06.002 (accessed 21 December 2017)

[3] WHO (2004) *Chronic suppurative otitis media – Burden of Illness and Management Options*

[4] Vanderpoll T, Howard D (2011). *Investigation into hearing impairment among Indigenous prisoners within the Northern Territory Correctional Services*. http://www.healthinfonet.ecu.edu.au/uploads/resources/21173_21173.pdf (accessed 21 December 2017)

[5] Murray N, LePage E, Butler T. Hearing health of New South Wales prison inmates. *Aust NZ J Pub Health* 2004; 28: 537-541

Estimating the burden of disease due to Ear, Nose and Throat (ENT) and Head and Neck (H&N) conditions in the Pacific is difficult due to a lack of data and the incomplete reach of existing services to remote and outer island communities. Outpatient data from Tonga, the Solomon Islands and Vanuatu quoted in the draft PENTAG *Regional Plan* (see below) suggest that 25-30% of all outpatient attendances are for ENT disorders. Some degree of hearing impairment is present in more than half of the students attending the School for Children with Special Needs (SCSN) in Kiribati.[6]

Improved screening, clinical outreach and treatment capacity are fundamental to better defining the burden of disease and addressing untreated ENT and H&N pathology.

The Pacific ENT Advisory Group and the draft Regional Plan

In November 2015, at the request of PICs, the SSCSiP program convened a Pacific Ear Nose and Throat Advisory Group (PENTAG) to explore ways to strengthen ENT and Audiology services in the Pacific.

PENTAG developed a vision and a draft medium-term *Plan* for the region. The *Plan* focused on estimating the burden of disease in countries and the region and the resources needed to address it, and gradually strengthening country capacity and systems to provide and monitor ENT and Audiology services.

The *Plan* has not yet been implemented, and the Advisory Group has not reconvened.

The scoping study

Purpose

The PRCSWIP is undertaking a scoping study to examine the feasibility of implementing the PENTAG medium-term *Plan*. The study will develop recommendations for the Pacific Directors of Clinical Services (DCS) and Heads of Health (HOH) meetings in 2018 on necessary adjustments or prioritisation within the *Plan*, how best to implement it, and what further background work might be needed to strengthen ENT, H&N surgery and audiological services in the Pacific.

Terms of reference for the scoping mission are included at Annex 1.

Preliminary Country visits

As part of the scoping study, a consultant from the PRCSWIP visited the ENT clinics at Vanuatu's two main health facilities, Vila Central Hospital (VCH) and the Northern Provincial Hospital (NPH), between 15 and 18 November 2017. VCH has been proposed as a potential training facility for health workers from Vanuatu and other PICs in ENT screening, diagnosis and treatment, and short courses and attachments have already been provided under the oversight of partners from visiting RACS Pacific Islands Project (PIP) ENT teams.

[6] Wilson O, Hodgson SA, Bury K. *Kiribati Audiology and Ear Health Project Report: 2014*

An incidental visit to Kiribati immediately following the Vanuatu visit enabled the consultant to also investigate the current status of ENT and audiology services at the national referral hospital, Tungaru Central Hospital (TCH), and the SCSN from 21-24 November 2017.

The two country visits provided a comparison of the situation in a PIC with more specialised ENT and audiology services and training programs (i.e. Vanuatu) with one where those services are provided only through general OPD clinics and visiting teams (i.e. Kiribati).

The findings and interim country-specific recommendations arising from those visits have been documented in a separate *aide memoire*.[7]

Nadi meeting and follow-up consultations with technical experts

The two country visits were followed by a regional consultation with selected PICs in Nadi, Fiji, on 27-28 November.

The purpose of the meeting was:

- to present and discuss the current status of ENT and audiology services and work force development in participating PICs,
- to discuss the findings of the country visits to Vanuatu and Kiribati,
- to review the draft PENTAG medium-term Plan from 2015, and
- to discuss how to revise and refocus the Plan to encourage and support its implementation.

Countries attending the meeting were those PICs with better developed ENT and audiology services: Fiji, Samoa, Solomon Islands, Tonga and Vanuatu. Attendees are listed at Annex 2.

The agenda for the meeting is attached at Annex 3.

Additional telephone consultations with non-PIC based specialists were undertaken following the country visits and the Nadi meeting. Those key informants included the RACS PIP Director and ENT Coordinator (who also provides ENT technical support in Samoa), members of PIP ENT teams who had visited Vanuatu, and other technical advisers with experience delivering ENT and audiology services in the Pacific and/or relevant technical expertise; they are also included at Annex 2. Some external advisors were not available as the Christmas–New Year break approached; their additional inputs will be sought opportunistically before the submission to the DCS and HOH meetings is finalised.

The present document summarises the outcomes and recommendations of the Nadi meeting and the key themes and messages emerging from subsequent discussions with technical experts. Those outcomes include an updated version of the draft *Regional Plan*, which is attached at Annex 6.

Subject to its acceptance by participants and other stakeholders, this report will be used to develop the discussion paper and proposal for the Pacific DCS and HOH meetings in April

[7] *Aide memoire*: Scoping Study for Strengthening Ear Health Training Programs and ENT Services in the Pacific – Visits to Vanuatu (15–18 November) and Kiribati (21-23 November 2017)

2018 about the further development of the ENT workforce and clinical screening and service delivery in the Pacific.

Current status of ENT, audiology and related services

Presentations by participating countries

Countries participating in the meeting each made a short presentation on the current status of their ENT and Audiology services and, where available, presented clinical data from their country's main ENT facility.

The country presentations are attached at Annex 4, and more detailed additional information from Vanuatu is available in a separate *aide memoire*.

All countries identified that their major **burden of disease** consists of common external and middle ear conditions, including acute and recurrent infections, which are amenable to treatment at the primary care level. Meningitis in the neonatal period or early childhood may also be responsible for hearing loss, either as a result of cochlear ossification due to the infection itself or ototoxicity related to some of the antibiotics that may have been used to treat it (e.g. aminoglycosides).[8]

Fiji, Samoa and Tonga have dedicated and either new or recently renovated space for an **ENT Clinic** in the Outpatients Department (OPD) of the national referral hospital. In the Solomon Islands, the national ENT Clinic is located within the OPD and, in Vanuatu, it shares space with the Eye Clinic and Physiotherapy Department in a separate building (where facilities are cramped and struggle to accommodate the number of patients seen and visiting teams).

Fiji (two, both expatriate) and Tonga (one) have qualified **ENT specialists**; one in each country is predominantly in private practice, but provides visiting specialist support to the public hospital system. Samoa and Vanuatu have one general surgeon who functions as the ENT focal point, and Vanuatu also has a long term expatriate ENT physician (and a new health workforce plan that includes positions for one specialist and two registrars). Only the Solomon Islands lacked a surgical focal point for ENT (although there is a Solomon Islands ENT surgeon who remained in Papua New Guinea after training); emergencies and complex acute cases are referred from the ENT Clinic for management by the on-call general surgeon.

Both the Solomon Islands and Vanuatu have a predominantly **nurse-led ENT work force**, including at the national, provincial and primary care level; all are also involved in preparatory screening of patients prior to PIP team visits. The other countries have specialised ENT nurses or nurse practitioners, but their main function is in national or sub-national referral centres where they provide primary and emergency clinical care as well as assisting in specialist outpatient clinics and in the operating theatre.

No country has a formally accredited **qualification** for ENT Nurses. Training is generally on-the-job, overseen by local or visiting specialists. Different curricula, clinical guidelines and

[8] Deltenre P, Van Maldergem L. Hearing loss and deafness in the pediatric population: causes, diagnosis, and rehabilitation. *Handb Clin Neurol* 2013; 113: 1527-1538. doi: 10.1016/B978-0-444-59565-2.00023-X.

protocols are used in the different countries, although all countries are familiar with most of the materials discussed at the consultation. Only the program in Fiji (which is based on the WHO *Ear and Hearing Care* training resources) has formally-measured competency requirements. Certificates are awarded on satisfactory completion of local training courses, but these are not recognised by any national qualifications authority or tertiary educational institution and do not contribute to formal career advancement.

Audiometry is available in all countries, conducted either by a trained technician or an ENT nurse who has received on-the-job training through a PIP or other visiting audiologist.

Access to **hearing aids** is variable. Vanuatu has recently initiated a large-scale program with the assistance of the Starkey Foundation. The Starkey Foundation has plans to extend its work to other PICs, starting with Fiji and then Tonga. Countries identified the undoubted value of such support, but noted that transitioning such a large-scale program as Starkey's into the Government system might be problematic – from both a financing and organisational perspective.

In other countries, hearing aids are accessed either privately or through small-scale Government programs.

No country had a specific **ENT strategy** or service development plan, and none had a national Ear and Hearing Health **Coordinating Committee** or Task Force. None had a dedicated budget for ENT services or ear health; although most could access Government funds through the clinical services, hospital or provincial health budget, this was generally inadequate to support meaningful or systematic expansion of preventive, screening, curative or rehabilitative services.

All countries attending the consultation had at least annual visits from a RACS PIP or equivalent **international specialist team**, and most had at least one active partnership with a domestic or international non-government organisation (**NGO**) or clinical agency.

Updating the draft Regional Plan

The draft *Regional Plan* was prepared in 2015. It identifies the high-priority objectives that need to be met in PICs: **prevention and early diagnosis**; capacity to provide appropriate **treatment**; and **rehabilitation** (although it lacks detail on how interventions like amplification, speech therapy and education in signing might be achieved).

After a review of the 2015 *Plan* and introduction to group work (Annex 5), participants commenced group discussion.

Participating countries noted that, while the draft *Regional Plan* was highly aspirational and would need many years to implement, it was still largely relevant. In particular, the draft *Plan* lacked clarity on responsibility individual strategies or action plans – i.e. whether this was individual countries or PENTAG. In the absence of identified resources for PENTAG and a continuing regional coordination function, many regional aspects of the Plan would prove difficult to implement.

There was overall consensus among country delegates that any revision to the *Plan* would need to strengthen the feasibility of the required strategic actions, identify responsibility for implementation, and adopt an achievable time scale.

Subsequent discussion therefore focused on: i) identifying the **early priorities** for each country and the region; and ii) refining the **functions** within the draft *Regional Plan* to clarify the entity or partner responsible for implementing each strategic action. This approach is now reflected in the revised version attached at Annex 6.

Key issues identified by participating countries

Participating countries reached consensus on a number of issues that ought to be addressed – if possible – through a revised Regional Plan and any country action plans arising from it:

1) **Hearing loss is a low priority** for PIC governments and development partners

Hearing loss makes a significant contribution to clinical workload and disability in all PICs, and the social and educational impact is well recognised (see pages 1-2, above).

2) **Lack of resources**

Most countries have limited financial resources to equip public facilities to address the burden of ENT disease, including for hearing testing in neonatal and paediatric settings. Health workers already involved in screening newborn babies and preschool children for other conditions generally lack ear and hearing care training. Standards of equipment are variable but often basic (with some exceptions).

Lack of resources can be traced to the absence of specific strategic or service development plans for ear and hearing care. Ear care and hearing programs are generally not included in NHSPs, are generally not costed, and do not have a dedicated budget within hospital or specialised clinical services expenditure plans.

3) **Lack of community and health worker awareness**

Health workers caring for newborn and preschool children are not aware of the benefits of ear and hearing screening and of early intervention. In primary health care (PHC) settings, routine examination of the ears is generally omitted if specific symptoms are absent. Even when ENT symptoms are present, examination may not be systematic, thorough or of adequate quality.

Parents are often not aware that early detection and early intervention (or its omission) can have a significant impact across the whole of a child's life. They are generally not aware of the rights of children with hearing loss, and they are generally not empowered to advocate for them.

Civil society tends to wait for Government (health services) to take action, when it could be a powerful force for societal change.

4) **Lack of integration of clinical and supportive services**

Most countries have insufficient ear and hearing care personnel to support children and adults with an identified hearing problem; an audiology team needs to confirm and assess

the hearing loss, and the child's development or individual's ability to engage and function within society needs to be supported by specific health and education services.

Preschool and special early childhood education services for children with hearing impairment are either completely lacking or not available until the child enters primary school.

Referral, back-referral and follow-up networks and the information systems to support them are often inefficient or ineffective; a functional patient referral network is as important as the service provision itself.

The 'reach' of services into the community does not yet meet the requirements of universal health care – it may, at the moment, only be accessible to those with easy access to facilities that are able to provide secondary or specialised care or, where available, may focus only on identified high-risk groups (e.g. children attending special schools, prisoners).

5) Absence of appropriate training programs

Access to ENT and audiological training is generally lacking across the spectrum of the health workforce. Training-of-Trainers (TOT) programs for Primary Ear Health Care personnel will be an important starting point, focusing on otoscopic and diagnostic skills, syringing and removal of foreign bodies and wax.

This needs to be backed up by higher level skill development for clinical leaders within the surgical work force and – in particular – for nurse practitioners working as ENT focal points at national and sub-national level. National health workforce plans should recognise and include the roles of specific individuals, e.g. ENT Nurse Practitioner, Audiology Nurse, etc.

All training should be accredited so that it contributes to career progression, and qualifications should ideally be recognised at the regional level and within national public service structures.

6) Communication support, remediation and rehabilitation

Patients with significant hearing disability lack access to appropriate communication support, e.g. sign language interpretation or amplification devices such as hearing aids.

Speech pathology represents a missing cohort of health worker in most PICs.

7) Sustainability

Where there is a high level of dependence on external resources, sustainability may be compromised by the omission of a plan to eventually transition service delivery on to Government or user-pays systems.

8) The Regional Advisory Group

Countries participating in the consultation agreed to the importance of reinvigorating PENTAG as a regional catalyst for strengthening ENT and audiology services. Proposed terms of reference for the regional Advisory Group will be developed as part of the submission to the DCS and HOH meetings in 2018.

Additional issues and priorities arising from subsequent discussion with external experts

Consultation with external technical advisers after the meeting strongly supported the country perspectives and priorities, particularly in relation to **skill transfer** and **training** functions for specialised medical and nursing staff and for PHC level health workers and **better definition of the burden of disease** in each country.

They also identified a small number of additional priorities:

9) Clinical and audiology outreach services

In conjunction with better funding and organisation of specialised clinics and services, it is important to identify funding for community outreach and sub-national audiology services. Depending on the health financing system and the level of centralisation or decentralisation of service delivery, this may need to be identified within provincial budgets (rather than through a national ENT and hearing care budget).

10) Appropriateness of Essential Drug and Equipment Lists

PIP teams have noted that national Essential Drugs Lists (EDL) may not be well aligned with the observed spectrum of disease, and that the availability of appropriate equipment and instruments varies between countries and facilities; at the moment, most countries receiving team visits are reliant on the teams bringing specific consumables and items of equipment – and sometimes leaving stocks behind, which are useful until supplies are exhausted.

Visiting specialists (either on a country-by-country basis or operating through a regional clinical Advisory Group like PENTAG) can advise on revisions or necessary inclusions in national EDLs.

11) Evolving role of visiting teams, and appropriate focus of activities

Partners from the RACS PIP and other visiting teams recognised that reaching ENT specialisation within the medical workforce would not be achievable for some years to come, and that the pool of clinicians across the countries visited was small (perhaps 12 individuals); they therefore strongly supported PIC recommendations to develop accredited training programs and career pathways for ENT nurses.

They also acknowledged the changing nature of PIP visits, which used to focus explicitly on service delivery but now has a much broader function in relation to capacity development (at a variety of levels within the health workforce) and systems of clinical governance and planning. An important part of this evolution is that teams **should no longer undertake simple or routine tasks** that ought to be within the capability of local counterparts (e.g. tonsillectomy) during visits to the Pacific unless specific training benefits have been identified; it is still appropriate for their clinical role to address more complex cases (where there is an expectation that they will achieve a positive outcome).

12) Networking and partnerships in support of operational research

In May 2017, the 70th World Health Assembly passed a renewed resolution to intensify

action to prevent deafness and hearing loss.[9] Delegates noted that nearly 90% of people with hearing loss live in low- and middle-income countries (like PICs), which often lack resources and strategies to address hearing loss. Many cases of hearing loss can be avoided, and most can be successfully managed through cost-effective interventions.

The new resolution guides governments and development partners to: integrate strategies for ear and hearing care within the framework of their PHC systems and universal access to prevention and care; to establish training programs for health workers; to implement prevention and screening programs for high-risk populations; and to improve access to affordable, cost-effective, high-quality, assistive hearing technologies and products. All of these priorities are identified and addressed in the updated Regional Plan (Annex 5).

Depending on the health financing system and the model of service delivery, there may be opportunities to partner with regional organisations to undertake community based research or surveys to assist with better defining the burden of ENT-related disease and hearing loss in Pacific communities.

Recommendations

In conclusion, the meeting made the following five recommendations to the PRCSWIP, through SPC:

1. To revise the *Regional Plan* based on discussions at this consultation and subsequent discussions with external technical experts

2. To compile submissions to the 2018 DCS and HOH meetings, incorporating the updated *Regional Plan* and the principal findings of this meeting report

3. To convene a regional working meeting on ENT-related TOT and national accreditation to ensure alignment and convergence of the various national training programs and curricula, with a strong initial focus on senior ENT nurse practitioners and nurses working at the PHC level

4. To explore the feasibility of forming a regional ENT and Audiology Hub; the Hub would potentially have multiple functions, but an early priority should be to establish a communication network with country ENT focal points and ensure access to biomedical and equipment databases and catalogues to advise and support equipment purchase and maintenance

5. To reconvene and reinvigorate PENTAG, aiming for a regional meeting around October 2018 to:

    a. Endorse an overall monitoring and evaluation framework for the revised *Regional Plan*

    b. Collate and compare data from countries (where available), to start to build a more accurate picture of the burden of ENT-related disease in the region

[9] WHO (2017) *Prevention of deafness and hearing loss* (WHA resolution 70.13, 31 May 2017)

c. Review national drug and equipment lists, with a view to developing a regional standard or set of recommendations to guide updating of national EDLs

d. Subject to feedback from the HOH meeting, prepare a submission to the 2019 Pacific Health Ministers' Meeting

Annexes

Annex 1 – Terms of reference for the ENT scoping mission

Annex 2 – Participants in the Nadi meeting, and key external informants

Annex 3 – Agenda, Regional ENT Consultation, Nadi, 27-28 November 2017

Annex 4 – Country Presentations

Annex 5 – Updated Medium Term Plan for strengthening ENT and Audiology Services in the Pacific

Annex 1: Terms of reference for the ENT scoping mission

A. Project Title: Ear, Nose and Throat Consultation

B. Project Description

- Conduct ENT consultation with selected Pacific Island Countries and ENT consultants in Australia and New Zealand

C. Scope of Work

- Review available documentation in relation to the development of preventive, primary care and rehabilitative ENT services in PICs (including but not limited to the documents listed at Section J of these TORs, below)
- Review available documentation in relation to provision of specialist ENT services to PICs
- Undertake an initial scoping visit to Vanuatu to review clinical facilities at Vila Central Hospital and Northern Provincial Hospital, and to discuss further development of services and a possible role for Vanuatu as a regional or sub-regional training centre with key health decision-makers and other stakeholders
- Help to facilitate discussions with selected PIC delegates during a regional ENT consultation in Nadi
- Undertake follow-up consultations by telephone and email with key clinical support personnel in Australia and New Zealand

D. Expected Outputs

- A completed Vanuatu scoping mission report
- A completed regional consultation report

(Both reports will be presented at the regional Heads of Health meeting 2018)

E. Institutional Arrangement

The Contractor will be responsible to SPC's Team Leader – PRCSWIP, Public Health Division for all aspects of the work, including the production of the required outputs. For logistic support and other management issues, PRCSWIP will coordinate with SPC Contracts, Travel and Accounts departments.

F. Duration of the Work

15 days in total, between December 11th and December 29th, 2017.

The number of work days and the period of work may be amended if agreed by the parties and reasonably required to deliver the expected outputs.

G. Duty Station

Desk work (including email and telephone consultation with regional experts) to be conducted from the Consultant's home base in Canberra, Australia.

Consultations with PIC stakeholders to be conducted in Vanuatu (and any other locations that may be feasible as incidental activities to the Consultant's other work, e.g. Kiribati), and in Nadi, Fiji.

Annex 2: Participants in the Nadi meeting, and key external informants

NAME	DESIGNATION	COUNTRY	CONTACT
DOCTORS			
Dr Oh Chungyeaon	ENT Surgeon, Colonial War Memorial Hospital	Fiji	och7512@gmail.com
Dr Jay Gallardo	ENT Surgeon (private practice)	Fiji	jaygallardo27@gmail.com
Dr Sione Pifelelti	General Surgeon, Tupua Tamasese Meaole Hospital	Samoa	SioneP@nhs.gov.ws
Dr Sepiuta Lopati	Senior ENT Registrar, Vaiola Hospital	Tonga	sepilopati@yahoo.com
Dr Willie Tokon	Director, Hospital and Curative Services, MOH	Vanuatu	wtokon@vanuatu.gov.vu
NURSES			
Ms Sereana Bulivou	Nurse-in-Charge, ENT Clinic, Colonial War Memorial Hospital	Fiji	sereanadiba@gmail.com
Mr Ulisese Tapuvai	Deputy Director of Nursing, National Health Service	Samoa	uliseseT@nhs.gov.ws
Ms Mary Loduha	Nurse-in-Charge, ENT Clinic, National Referral Hospital	Solomon Islands	mloduha@gmail.com
Ms Loleta Lini	Nurse-in-Charge, ENT Clinic, Vaiola Hospital	Tonga	loletalyn.85@gmail.com
Ms Andorine Aki	Nurse-in-Charge, ENT Clinic, Vila Central Hospital	Vanuatu	aaki@vanuatu.gov.vu
EXTERNAL ADVISORS			
Dr Perry Burstin	ENT Surgeon	Australia (visiting Vanuatu)	calandperry@bigpond.com
Dr Bernie Whitfield	ENT Surgeon; RACS PIP ENT Coordinator	Australia (visiting Samoa)	Bernard.Whitfield@ health.qld.gov.au
Mr Kiki Maoate	Paediatric Surgeon; RACS PIP Program Director	New Zealand	kiki@healthspecialists.co.nz
Prof Peter Thorne	Professor of Audiology, University of Auckland	New Zealand	pr.thorne@auckland.ac.nz
Ms Oriole Wilson	Audiologist	New Zealand (visiting Kiribati)	oriole@ojwilson.co.nz
Ms Kahn Alebury	ENT Nurse	New Zealand (visiting Kiribati)	kalebury@xtra.co.nz
SPC (PRCSWIP)			
Dr Berlin Kafoa	Team Leader	Fiji	berlink@spc.int

Dr Rob Condon	Public Health Physician (PRCSWIP consultant)	Australia	rob@robcondon.org
Ms Avikali Tila	Finance and Administration Assistant	Fiji	avikalit@spc.int

Annex 3: Agenda, Regional ENT Consultation, Novotel Hotel, Nadi, Fiji; 27-28 November 2017

Time	Day 1 Agenda	Time	Day 2 Agenda
8.30 – 9.00	Welcome and Introduction Background of Regional ENT Consultation Dr Berlin Kafoa & Dr Rob Condon	8.30 – 9.00	Recap of Day 1 Dr Willie Tokon
9.00 – 9.20	ENT in Tonga Dr Sepiuta & Ms Loleta Iini	9.00 -10.00	Group Work (Specific Objectives)
9.20 – 9.40	ENT in Samoa Dr Sione P & Mr Ulisese T	10.00 – 10.30	*Tea Break*
9.40 -10.00	ENT in Solomons Ms Mary Loduha	10.30 – 12.00	Finish drafting Group Reports, Strategy adjustments and Recommendations DEVELOP A SHORT PRESENTATION: Feedback and agreement on Key Recommendations (overall strategy, Strategic Objectives and NEXT STEPS (e.g. 3 things) for each Objective
10.00 – 10.30	*Tea Break*	12.00 – 1.00	*Lunch*
10.30 – 10.50	ENT in Vanuatu Ms Adorin Aki	1.00 – 3.00	Short report from RC Vanuatu visit GROUP PRESENTATIONS Discussion and Agreement on how to carry forward the Key Recommendations (e.g. next steps, additional consultations with partners and at country level, etc.)
10.50 – 11.10	ENT in Fiji	3.00 – 3.30	*Tea Break*
11.10 – 11.40	Regional ENT Issues: Review of the *Conceptual Plan for strengthening ENT and Audiology in the Pacific*, and key questions that need to be answered	3.30 – 4.00	Discussion on recommended structure of discussion paper to go to HOH Meeting in 2018
11.40 – 12.30	Discussion and Agreement on Topics for Group Work		
12.30 – 1.30	*Lunch*		
1.30 – 3.30	Group Work (3 groups)		

Annex 4: Country Presentations to the Regional ENT Consultation

[See separate files]

Annex 5: Introduction to Group Work

[See separate file]

Annex 6: Updated Medium Term Plan for strengthening ENT and Audiology Services in the Pacific (First Revision, November 2017)

[See separate file]