

Directors of Clinical Services Meeting **Réunion des directeurs des services cliniques**

13TH DIRECTORS OF CLINICAL SERVICES MEETING

Tanoa International Hotel, Nadi, 29 and 30 August 2022

Meeting report

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13th Directors of Clinical Services (DCS) Meeting

(Tanoa International Hotel, Nadi, Fiji, and virtual, 29 and 30 August 2022)

Hosted by the Pacific Community

Report of meeting

The meeting papers are available in English and French at:

<https://phd.spc.int/meeting-documents-0>

Meeting objectives:

The objectives of the 13th DCS meeting were to discuss and make recommendations on:

- clinical governance
- education and research
- health emergencies
- health workforce
- Pacific clinical and nursing networks
- regional clinical services updates

1. Opening

1. The Chair, Dr Ana Akauola, Tonga, welcomed participants including new members and those attending virtually. She expressed sympathy for those who had lost loved ones during the COVID-19 pandemic and thanked health-care workers for their dedication. The Chair also thanked all partners and organisations for their support for the Pacific health sector. The Deputy-Chair, Natano Elisala of Tuvalu, said the opening prayer.

1.1 Keynote address

2. Dr Jemesa Tudravu, Chief Medical Adviser, Ministry of Health & Medical Services, Fiji, said the meeting represented all Pacific health workers and commended their dedication during the pandemic. COVID had shown the need to improve the health infrastructure and workforce in Pacific Island countries and territories (PICTs). In particular, the pandemic highlighted the relationship between the health and economic sectors, and social determinants of health including poverty, housing, and access to education and transport. Clinicians must be partners in addressing these issues, including through engaging with the private health sector. Governments must continue investing in their health workforce, recognising that their trained staff are leaving for better conditions overseas. Another critical area for Pacific countries is progress towards universal health care (UHC), and possible regional solutions to support UHC. Dr Tudravu acknowledged the support of development partners and agencies for the Pacific health sector.

1.2 Vote of thanks

3. Dr Berlin Kafoa, Director of SPC's Public Health Division (PHD) thanked Dr Tudravu, noting that the DCS meeting has grown significantly and a new generation of clinicians is taking a leading role, with women well represented. Dr Kafoa acknowledged donors, including France for its special support, and thanked Australia, especially its Chief Nursing and Midwifery

Officer, Professor Alison McMillan, for making critical care training available online to PICT health workers during the pandemic.

1.3 Regional health architecture and PHD work programmes

4. Sunia Soakai, Deputy Director of PHD, described the region's health architecture and PHD's role. PHD takes its lead from Pacific Islands Forum Leaders, the Pacific Ministers of Health Meeting (PHMM) and Pacific Heads of Health meeting, and contributes to the Sustainable Development Goals (SDGs), particularly SDG 3. The division works in collaboration with PICT health systems, WHO, UNICEF, and other international and regional organisations and NGOs.
5. PHD has four programmes: Clinical services; Non-communicable diseases (NCDs); Governance; and Surveillance. Each programme is supported by communication and administrative resources, including a recently recruited digital adviser. Visibility and accountability are essential to PHD's success.
6. In addition to its four programmes, PHD responds to country requests for training and support, including in the event of a natural disaster or disease outbreak, such as the onset of COVID-19. The pandemic was a wake-up call for Pacific laboratory services. Following upgrades, all PICTs, except two, now have PCR equipment and capacity, which they must now maintain.
7. SPC's current annual income is USD 83 million. Of that amount, PHD received USD 9 million, with additional funding received to address COVID. PHD accounts regularly for all expenditure. (For more information on PHD: <https://phd.spc.int/>)

2 Health workforce

2.1 Strengthening human resources for health (HRH) management and planning in Pacific Island countries

Presenter: Ms Deki, Technical Officer HRH, Division of Pacific Technical Support, World Health Organization (WHO) (virtual presentation); Co-Presenters (virtual) Papua New Guinea and Tonga

8. There have been many initiatives to increase the size and capacity of the region's health workforce, which is affected by high demand for staff, migration, aging and burnout. In PICTs, nearly 19,000 health professionals serve 10 million people, but these numbers do not reflect actual deployment, and the matching of resources and capability with demand. Issues include the availability, accessibility and quality of health workers, especially in primary care. Nurses and midwives make up around 74% of Pacific health workers and deliver the majority of health services, particularly in rural areas. Fiji, PNG and Samoa have medical schools. Most PICTs offer nursing training at diploma and bachelor level. A 2020 review of the quality of nursing and midwifery education and regulation in PICTs indicated that current standards for professional education do not meet population health needs.
9. Most PICTs have units and governance structures responsible for health workforce management, development and planning, and several (e.g. PNG and Tonga) are developing information systems and collecting data to provide up-to-date HRH Country Profiles. COVID exposed weaknesses in collecting and analysing health workforce data and in applying the results to guide decisions. Strategic planning and effective HRH units are essential for building and governing an adequate health workforce.

Recommendations for governments

- i. Commit to strengthening the ability of health workers to deliver essential services and also prepare for emergencies/pandemics and climate-related disasters.

- ii. Enhance the capacity of HRH units in Ministries/Departments of Health and establish health workforce governance structures.
- iii. Strengthen health workforce data collection, analysis and use for planning and policy decisions.
- iv. Use in-depth analysis of the HRH situation to support policy decisions through the health labour market framework.
- v. Review or develop national HRH strategic plans, policies, and packages of essential health services/role delineation policies.

Recommendations for development partners

- i. Provide technical support for implementing HRH commitments and building the capacity of HRH units.
- ii. Align support with government priorities for the health workforce and facilitate regional sharing of best practices in strengthening health workforce planning and management.

2.2 Overcoming barriers to medical education in Vanuatu Ministry of Health (MoH)

Presenter: Dr S. Natuman, Acting Director of Clinical Services, Vanuatu

10. Vanuatu is putting measures in place to improve its medical education, including continued education, and its ability to offer career pathways for its health workers.
11. Up to 2008, Vanuatu sent all its medical students to Fiji, PNG, Australia and New Zealand. It then began sending students to Cuba, China and Georgia. These students returned with lower levels of clinical competence. Different training standards, and the different languages used in their training created difficulties for admitting them to internship programmes in Vanuatu.
12. In 2015, Vanuatu set up a Pre-Registration Training Committee (PRTC) and began an internal internship programme with supervision provided by local specialists. It has recently set up the Vanuatu Clinical Training Programme (VCTP) for all clinical workers, not just medical interns, and has established a database of doctors' qualifications to support planning. Vanuatu has a role delineation policy, though not yet sufficient staff to fully implement it. All doctors who pass their training have to work in a rural area for two years.
13. As part of providing continued medical education, Vanuatu needs scholarships to be allocated for postgraduate training for clinical staff (at present, scholarships are awarded across the Public Service). The MoH does not fund continuing education, nor subscriptions to journals and apps such as UpToDate.
14. Dr Natuman acknowledged DFAT's support, and stressed that development partners must make long-term commitments to achieve real impact.

Recommendations for governments

- i. Select well-accredited institutions for medical studies, and map out a path to success for each trainee, particularly for graduates trained outside the region.
- ii. Identify the barriers that prevent trainees from progressing, and work at national and regional levels to find solutions.
- iii. Provide policies that encourage students to develop careers in health, and develop continuing education programmes to increase their skills or enable specialisation.

Recommendations for development partners

- i. Consider providing scholarships for doctors, nurses, dentists and allied staff.

- ii. Support Fiji National University (FNU) and the University of PNG (UPNG) to provide more placements for clinical staff wishing to train in specialist fields.
- iii. SPC, WHO and other partners to provide a list of well-accredited universities (regional and non-regional) to assist governments in decisions about where to send students for medical studies.

2.3 Q and A

15. Cook Islands has the same issues as Vanuatu, especially for returning Cuban graduates. It has developed its own internship programme but lacks enough specialists to look after interns. After two years, there are doctors who are ready to progress, but the Cook Islands programme needs to be accredited.
16. Dr Kafoa said every country wanting to develop an internship programme for returning students should first get local accreditation from their medical council and then seek accreditation from regional universities. This requires a formal request from PICTs to universities.
17. Dr Donald Wilson, Acting Dean, College of Medicine, Nursing & Health Sciences, FNU, said Vanuatu has had discussions with FNU. FNU can assist assessment in countries and is happy to discuss requirements with them.
18. Dr Nuha Mahmoud, WHO (Team Coordinator, NCD and Health through the Life Course, Division of Pacific Technical Support, Fiji) said the Arab Board of Health Specializations provides various speciality programmes. A similar Pacific Board could be established to accredit physicians in various areas.

2.4 Samoa's health workforce – challenges and opportunities

Presenter: Dr Glenn Fatupaito, MoH, Samoa

19. Samoa's health system was restructured in 2019 with the merger of the National Health Services and MoH into a single entity. The new entity has a focus on public health, with the change in emphasis sometimes seen as being at the expense of clinical services. The merger is still ongoing.
20. Samoa has 81 doctors in the MoH, but it should have 100. People have resigned or migrated and, as a result, senior staff are retained. However, there is a changing of the guard with young health workers taking on roles in administration, taskforces, etc.
21. There are 300 nurses in the clinical area. Midwifery training is only provided for nurses wanting to progress.
22. Samoa is proud of its biomedical services. It has two qualified biomedical engineers and a new structure is awaiting approval. Several e-health initiatives have been implemented, including M-Supply and Tupaia, which was useful during the vaccination programme. Work in progress includes digitisation of diagnostic services such as radiology, and development of telehealth, teleradiology and telepathology.
23. Challenges include
 - fully implementing the new health strategy;
 - chronic staff shortages;
 - overcoming the period of stagnation caused by COVID, with no visiting medical teams, and delays in procurement. The pandemic also showed the need to plan ahead to avoid shortages;

- the need for the Public Service Commission to approve new posts, which delays recruitment;
- funding for training opportunities. Most staff have to seek training support through NZAID, AusAID, Japan, etc., with seemingly fewer 'guaranteed' opportunities for health care workers each year.
- the need to boost in-country training.

24. Dr Fatupaito acknowledged Samoa's partners, including RAC's Pacific Islands Program and Fred Hollows New Zealand.

Recommendations for governments

- i. Strengthen in-country and regional institutions:
 - Develop in-country training, possibly starting with short courses (Samoa is trialing supervision in-country with anaesthesia and surgery diplomas at FNU). Staff shortages, especially during pandemics, make overseas training a less favoured option.
- ii. Consider inter-regional staff and resource sharing in times of need, e.g. a forensic pathologist from Fiji is working in Samoa.

Recommendations for development partners

- i. Continue existing in-country training support.
- ii. Provide more opportunities for international exposure of health workers.

25. Dr Kafoa noted that agencies such as RACS often provide scholarships when government scholarships have all been taken up. He made a plea to partners to fill this gap (SPC sometimes provides fees where there is a gap, but not living support).

[2.5 Update on clinician workforce capacity](#)

Presenter: Dr Revite Kiriton, PHD, SPC

26. SPC sends an annual survey to clinicians employed by PICT MoHs. Nine PICTs have provided data and a preliminary analysis has been done. PICTs that have not yet responded to the survey are requested to do so.

27. Preliminary results:

- A comparison of data for the past 10 years (since 2012) shows the number of local doctors has approximately doubled for some PICTs, with Tuvalu having the biggest increase, but has declined in other.
- The proportion of expatriate doctors has decreased in six countries.
- There are more female doctors now, with the largest increases in Nauru and Kiribati.
- Tuvalu has the youngest health workforce, while the Cook Islands and Tokelau workforces are much older.
- The number of local doctors with an MMed has increased, especially in larger PICTs.
- There has been an increase in training in speciality areas and in SAO (surgery anaesthesia and obstetric) density.

[2.6 Q and A](#)

28. French Polynesia advised against separating clinical and public health workforces. Experience during COVID showed the value of this approach.

29. Dr Tudravu said Fiji remodelled its provision of health services following COVID and is now focused on integrating clinical and public health. He noted that post COVID, the staff attrition rate had increased, especially among nurses. More evidence of the rate was needed, along with a regional approach to addressing it.
30. Solomon Islands noted the changes highlighted by the preliminary analysis of survey data and the need to look at people going into subspeciality areas. Solomon Islands still needs support for local capacity but is looking to replace VMTs.
31. Vanuatu requested more flexible postgraduate training from FNU, i.e. part of courses done in Fiji and part at home.
32. Dr Wilson, FNU, said when students apply for postgraduate training, the university tries to ensure that their in-country position is filled. If people are being trained in-country, FNU needs to assess the supervision.
33. Sunia Soakai said a full health workforce assessment has always been presented to ministers and this will continue at the next PHMM.

3 Education and research

3.1 PIVOTS – Pacific Island Virtual Online Training in Surgery

Presenters: Professor Ram Nataraja, Monash University; Dr Abhay Choudhari, FNU (virtual)

34. The PIVOTS six-week pilot course was delivered by Monash Children’s Simulation (MCS) in collaboration with FNU, facilitated by the RACS Global Health Pacific Island Project. It included four webinars, online learning with a comprehensive surgical curriculum, and hands-on training in laparoscopic surgery, using eoSim simulators and SurgTrac software, at FNU centres in Suva, Lautoka and Labasa. In addition to providing training in laparoscopic surgery, the course was supplemented by an in-country visit and delivery of a MCS clinical educators course for local FNU staff.
35. Participants carried out a total of 1274 core laparoscopic tasks including 87 hours of practice. All rated the course highly (8.9/10) and indicated their skills had increased significantly.
36. Challenges for PIVOTS included technical issues with enrolling students in SurgTrac, and the timing of webinars. Guidelines were developed for SurgTrac and webinars were repeated in the evening to allow everyone to join in. Obstetrics and gynaecology participants had difficulty accessing the simulator sites due to distance, so they were provided with bench trainers.
37. FNU’s involvement was key to the successful delivery of the course.
38. **Future directions/lessons**
 - i. PIVOTS enables access to excellent surgical education throughout the year, without reliance on visiting surgical teams.
 - ii. PIVOTS focuses on surgical education and maximises improvements to patient care in low-resource settings.
 - iii. Engagement and partnership with local educators and clinicians are key to ensuring learner engagement and relevance.
 - iv. Educational interventions upskill local faculty and improve the delivery of course content.
 - v. There are plans for staged implementation of the PIVOTS programme in all interested PICTs to improve surgical education and delivery of surgical care.

3.2 Impact of the Family Medicine Programme in Tonga

Presenters: Dr Ana Akauola and Dr Ana Maile, Family Medicine Medical Officer, Tonga

39. Family medicine courses (postgraduate and masters) are delivered in Tonga by an Australian trainer, ROCKETSHIP (Remote Opportunities for Clinical Knowledge, Education, Training, and Support for Health in the Pacific). ROCKETSHIP also works in Solomon Islands, Vanuatu and Timor Leste.
40. The courses are designed to strengthen primary care and achieve better health outcomes (e.g. NCD prevention, lower infant mortality, longer life expectancy). The programme will improve access to essential services for rural people, and advance progress to UHC. Discussions with DFAT are underway on establishing 'Super Clinics' in Tonga to improve the delivery of services to communities.
41. The four-year programme was initiated by Dr Lisiate 'Ulufonua, former Medical Superintendent of Vaiola Hospital, and was established in 2019 with four trainees. After completing a postgraduate diploma, three trainees are undertaking a masters.
42. After initial reluctance, the development of family medicine is now seen more positively as an option for Tongan medical graduates considering specialisation. The number one challenge for the programme is funding. While DFAT has provided support, funding shortages have delayed the delivery of some modules. Lack of internet in some areas is also a problem.
43. Dr Akauola said the MoH has a mandate to strengthen primary health care with the NCD burden necessitating changes in the way services are delivered to communities. She acknowledged FNU for its support and encouraged all PICTs to adopt family medicine programmes.
44. **Future directions**
 - i. The impact of a new health programme, and the skills and knowledge gained by graduates, cannot be measured instantly. It is important that monitoring of the family medicine programme includes achievements and indicators that can still be measured in three to five years.
 - ii. The MoH will continue to seek funding from development partners and donors to ensure the programme is sustained. Most important is ensuring that it contributes to achieving UHC, high-quality health care and healthy lifestyles.

3.3 Q and A

45. Australia is looking at better meeting the needs of rural people, including by developing rural generalists and supporting specialised training for allied professions such as nursing. Multi-disciplinary teams are essential.
46. French Polynesia recognises the value of family medicine for small communities in remote areas and is developing programmes for nurses. However, managers are hard to get onboard with their tendency to focus on surgery, etc. WHO and SPC must also be aware that primary care needs investment.
47. Solomon Islands is trying to develop a postgraduate programme in rural medicine. It has a stream that focuses on surgery and anaesthesia as well as public health.
48. Dr Kafoa requested recognition of family medicine in scholarship programmes and that Medical Councils recognise graduates as specialists.

3.4 RACS Global Health Pacific Islands Program (PIP) updates

Presenters: Philippa Nicholson, Head of Global Health, and Robyn Whitney, Global Health Program and Operations Manager, RACS

49. PIP objectives include building the competence of Pacific clinical service professionals; ensuring VMTs meet PICT clinical and training needs; supporting improved planning by MoHs; and providing educational resources for Pacific clinical training institutions. PIP's core elements are regional partners, volunteer specialists, and the commitment of in-county health workers.
50. **Progress**
- RACS funded 25 places for Pacific nurses to undertake an online Postgraduate Certificate in Perioperative Nursing through the Australian College of Nursing.
 - VMTs and in-country clinical training continue to support the goal of localisation of skills. Both resumed after being disrupted by COVID and border closures. PIP ran 12 webinars during this period with nearly 300 Pacific clinicians participating. Pacific clinicians who receive support to undertake external training are expected to return to their countries to pass on their skills.
 - The PIVOTS pilot (see section 3.1) was successfully completed and the project will expand to other PICTs during the next PIP phase.
 - The annual PIP Partner Reflection Workshop will be held on 31 August 2022 with topics to include the current phase of PIP; PICT priorities for clinical services support and capacity building; and effective communication.
51. After the current phase of PIP ends in September 2022, the programme will be evaluated. Meanwhile, planning for the next phase of DFAT's Pacific Clinical Services and Health Workforce Improvement Programme (PCSHWIP) is underway, with RACS, SPC and FNU working with DFAT on its redesign. PIP is one component of this programme. RACS wants to continue PIP and many country representatives will have been in contact already to develop a PIP annual programme aligned to their needs. The new PIP programme will seek to ensure equity in accessing courses across countries.
52. Pacific MoHs, hospital partners, Australia and New Zealand partners and SPC and FNU were acknowledged for ongoing collaboration, support and participation in the PIP programme.

Recommendations

- i. RACS is looking forward to receiving MoH priorities for clinical support and training for the next year (Sept 2022 – August 2023) from the 11 Pacific Island countries that participate in PIP. This will enable RACS to complete country-level activity implementation plans and budgets based on Pacific MoH clinical priorities.
- ii. RACS supports meeting scholarship needs.

3.5 Burden of sepsis in the Pacific – Kiribati Audit 2020

Presenters: Dr Hansell, Clinical Adviser, Clinical Services Programme, PHD, SPC; Dr Tekeua Uriam, Director of Hospital Services, Kiribati

53. Sepsis and septic shock are life-threatening conditions and are the leading cause of in-hospital deaths in developed countries. The World Health Assembly and WHO made sepsis a global priority in 2017. WHO's first global report on sepsis in 2017 estimated 49 million people were affected by sepsis, with 11 million dying each year and millions more developing a disability.

54. Sepsis frequently results from infections acquired in health care facilities. It is an emergency and must be diagnosed and treated urgently to increase the likelihood of survival.
55. There is little data available on the incidence of sepsis in PICTs. To assess the burden of sepsis in Kiribati, an audit on sepsis and septic shock was carried out for admissions to Tungaru Central Hospital for a period of 12 months in 2020. Out of 112 cases, 63% died, and 37% were treated and discharged. Men (51%) and women (49%) were infected almost equally, but more men (59%) than women (41%) died. Most of the deceased were aged 30 – 69; 12 children under 5 died.
56. Challenges for treating sepsis include knowledge gaps for staff and communities, and ability to quickly diagnose and access the tools and medicine required for treatment.
57. Infection prevention and control are essential for prevention, requiring champions and good data collection. World Sepsis Day (13 September) is a good time to raise awareness.

Recommendations for governments

- i. Conduct ongoing audits to monitor the effectiveness of sepsis programmes and reduction of mortality in Kiribati.
- ii. Perform sepsis surveys or audits in PICTs to determine a baseline for monitoring and evaluating the effectiveness of interventions.
- iii. Celebrate World Sepsis Day 13 September in PICTs to raise awareness.
- iv. Conduct a national campaign to combat sepsis, recognising the need for a collective approach (political, clinical, public health, community, etc.).

Recommendations for development partners

- i. Support training and education of health care providers.
- ii. Support procurement of technical equipment (e.g. blood gas machines) to facilitate effective management of sepsis and septic shock.
- iii. Provide technical assistance for sepsis campaigns and continued strengthening of critical care services.

3.6 Q and A

58. Samoa acknowledged the sepsis presentation and the importance of raising awareness of the disease. Samoa is refocusing on sepsis.
59. Dr Kafoa acknowledged RACS' work in the region and requested that they also provide biomedical support. PICTs need well-trained technicians and FNU has a course on biomedical technology.

4 Health emergencies

4.1 COVID-19 and Monkeypox – Global and regional updates and WHO guidance in the clinical setting

Presenter: Dr Mahmoud, WHO

COVID-19

60. To date, there have been 392,512 COVID-19 cases in the Pacific and 2577 deaths. Border measures delayed introduction of the virus to PICTs and allowed time to prepare. Despite this, the Pacific has had several waves of COVID, with Marshall Islands currently experiencing a higher number of cases. Most of these cases are the result of community transmission.

61. Vaccination coverage is important with WHO aiming for 70%. While there has been high coverage of the elderly and of health workers in PICTs, only 58% of the Marshall Islands population is fully vaccinated.
62. Genomic sequencing is important to identify variants. However, RAT testing has reduced sequencing. Delta, which was the main variant, has now been overtaken by Omicron and BA 4 and 5. The transmissibility of the virus is also increasing.
63. In preparing for COVID, PICTs have made significant advances in laboratory, clinical and vaccination capabilities due to investments in biomedical equipment and workforce upskilling. All PICTs have access to RATs, 20 PICTs use GeneXpert machines for PCR tests, and all PICTs are linked to reference laboratories for whole genome sequencing. Many health facilities now have access to oxygen concentrators and oxygen plants, and COVID-19 vaccination campaigns led to cold-chain improvements. These investments in capacity and equipment will enable health systems to continue to respond to COVID-19 and other emerging infectious diseases.

64. **Future directions**

Based on the lessons learned during the pandemic, and the advances made, health systems have an opportunity to improve their ability to:

- i. detect and manage public health emergencies, develop emergency preparedness and response, and protect the most vulnerable;
- ii. use tools including vaccination, antivirals, testing and treatment to manage COVID-19;
- iii. revitalise essential health services including routine immunisation, including for people who have not accessed health services in the past two years;
- iv. leverage investments made during the pandemic (e.g. biomedical equipment, supply chain, community engagement, data management) to address future public health threats;
- v. develop a better understanding of national health system capacity and adjust public health and social measures to keep systems from being overwhelmed by surges in cases;
- vi. based on public health data, encourage measures like masking or limit public gatherings, as needed;
- vii. promote safe schools to prevent school closures and further loss of education;
- viii. continue communication with communities.

Monkeypox

65. Monkeypox was declared a Public Health Emergency of International Concern in July 2022. To date this year, 41,664 confirmed cases of monkeypox and 12 deaths have been reported to WHO from 96 countries. There have been 134 cases reported in WPRO. Most cases are in males (98%) with 95% identifying as MSM.
66. WHO has issued interim guidance on surveillance and contact tracing; laboratory testing and diagnosis; clinical management; infection, prevention and control; vaccine and immunisation; and gatherings (e.g. clinical management and infection prevention and control for monkeypox: <https://www.who.int/publications/i/item/WHO-MPX-Clinical-and-IPC-2022.1>; and immunisation: <https://www.who.int/publications/i/item/WHO-MPX-Immunization-2022.2-eng>

67. **Future directions**

- i. WHO recommends countries invest in surveillance, testing, other medical countermeasures, community engagement and systematic collection of clinical and epidemiological data and efficacy to inform future recommendations.
- ii. Clinical care needed for monkeypox is symptomatic treatment, including monitoring skin lesions to prevent secondary bacterial infection.
- iii. Temporary Recommendations issued by the WHO Director-General in relation to the multi-country outbreak of monkeypox accompanied the declaration of monkeypox as a Public Health Emergency of International Concern. Recommendations apply to countries based on their epidemiological situation, patterns of transmission and capacity.
- iv. States Parties, with no history of monkeypox in the human population or not having detected a case of monkeypox for over 21 days, are recommended to: activate coordination, strengthen readiness; plan and/or implement interventions to avoid stigmatisation and discrimination; establish disease surveillance; intensify detection capacity by raising awareness; engage community groups; focus risk communication on settings where transmission is likely higher; and report probable and confirmed cases to WHO through International Health Regulation mechanisms.
- v. States Parties, with recently imported cases of monkeypox in the human population and/or otherwise experiencing human-to-human transmission of monkeypox virus, including in key population groups and communities at high risk of exposure, are recommended to: implement a coordinated response; engage and protect communities; intensify surveillance and public health measures; use recommended clinical management and infection prevention and control guidance; contribute to medical countermeasures research; and adopt specific international travel measures.

4.2 COVID-19 Vaccine Certificate for Cross-Border Travel: 'Oceania Vaccination Voyager'

Presenters: Sunia Soakai and Rumanusina Maua, PHD, SPC

68. In 2020, a COVID-19 Economic Recovery Taskforce was established to oversee the region's economic recovery from the pandemic. Priorities included vaccination roll-out, resumption of regional travel, and leveraging opportunities to support regional recovery efforts, in particular, digitalisation. At the 51st Pacific Islands Forum in August 2021, the Australian Prime Minister offered support for vaccine certification, including digital vaccination certificates that could be used regionally and globally.
69. A technical working group established three phases for developing the certificates:
 - Phase 1: Building consensus and reaching regional agreement
 - Phase 2: Devising a solution, and building and implementing it
 - Phase 3: Supporting countries with readiness and integration
70. SPC engaged a digital health team from Accenture, which recommended that the region subscribe to the EU Digital Covid-19 Certificate (EU DCC).

71. There are many complexities to a regional solution, including countries' degree of readiness, and private sector inclusion, e.g. airlines.
72. The TWG surveyed countries' ability to issue a certificate, with 50% of PICTs showing some readiness. Countries were also asked about the support they required and their resources.
73. The following list of recommendations was then circulated to ministers for their consideration (it is not yet finalised):

Recommendations

- i. Note that the 6th Common Protocol proposed regional solution provides the opportunity to address challenges and gaps within each individual country's health information system and digital health, particularly for vaccination system registries. Those who are not immediately able to adopt the technology required to support issuance of digital certificates, by also including an outline of non-digital (wholly paper-based) certificates that comply with WHO's Digital Documentation of COVID-19 Certificate Vaccination Status Technical Standards (WHO DDCC: VSTS) can be supported through this work.
- ii. Note that countries within the region (New Zealand, Cook Islands, Niue, New Caledonia, French Polynesia and Fiji) are already aligning their development efforts based on the EU DCC model used by nearly 50 countries and territories.
- iii. To confirm and verify initial country survey results and findings on Protocol Agreement Readiness Assessment Determinations – issuance, verification and pre-arrival travel portal and information travel portal.
- iv. To formally request relevant technical support and capacity building needed to pursue a harmonised regional solution to allow SPC to progress with costed implementation of a solution.
- v. Develop an implementation roadmap per country.
- vi. Identify minimum infrastructure components and quantities per country.

Recommendations for development partners

- i. Technical and financial support for the Pacific region is essential to implement a vaccination certificate and development of this solution beyond COVID-19 through strengthening of health systems, including:
 - a. developing and supporting electronic medical records;
 - b. strengthening in-country capacity in ICT legislation for data privacy, protection and confidentiality.
- ii. Support digital literacy assessments for all health users to ensure capabilities and skill sets are available to respond to and prepare for future public health threats as PICTs continue to monitor and manage border reopening safely, even with the rise of other communicable diseases such as monkeypox and measles.
- iii. Identify cross-cutting investments in health system strengthening, particularly in development of vaccination systems, to ensure collaboration, effective partnership, and clarity in lead and support roles as necessary.

4.3 Q and A

74. Dr Kafoa said the Pacific is at a pivotal point for vaccination. Regional support will provide an opportunity to transition vaccination data to a regional vaccination record, which will be important if there is another pandemic.
75. The Chair urged countries to provide the requested data on COVID and monkeypox.

4.4 Clinical Management Technical Working Group (CMTWG) update

Presenter: Dr Karen Hammad, WHO

76. The CMTWG was formed under the Joint Incident Management Team (JIMT) . It is co-chaired by WHO and SPC and meets fortnightly. The primary objective of the CMTWG is to coordinate support to PICTs in COVID-19 clinical management and implementation.
77. A feature of the COVID response has been an increase in donations of biomedical equipment to PICTs. The equipment is used daily in diagnosing and treating patients. However, PICTs have limited support for installing, using and maintaining the equipment. Recently, CMTWG surveyed the PICT biomedical workforce. The 31 responses received showed most staff had a biomedical qualification. Radiology (CT) and laboratory were most commonly cited as areas where technicians lacked training. Other challenges included lack of resources and staff, management support and suitable working spaces, and delays in procuring parts and supplies.
78. Respondents said their jobs would be made easier by in-person training; online training; a network; and written guidance and webinars.

Recommendations for governments

- i. Strengthen the existing biomedical workforce through:
 - a. providing incentives such as higher salaries and retention pay;
 - b. supporting access to informal biomedical training opportunities focusing on radiology, laboratory, office management, general repair and maintenance, manufacturer/supplier training, electrical work and equipment in specialty areas such as operating theatres, ICUs, dialysis and dental;
 - c. supporting the development of an inter-country network for the biomedical health workforce.
- ii. Strengthen biomedical support through:
 - a. supporting access to biomedical training leading to formal qualifications;
 - b. awarding tenders only to manufacturers that provide ongoing and timely support to PICTs through provision of spare parts and technical advice;
 - c. providing resources and/or considering policy reform to support biomedical initiatives such as strengthening spare parts procurement and management, access to biomedical testing and analysing equipment, and upgrading working spaces.

Recommendations for development partners

- i. The CMTWG will conduct a further analysis of the current status of biomedical equipment in PICTs to better inform future procurement to prevent wastage. A concept note with the findings of the workforce and equipment surveys will be shared with partners highlighting ways in which biomedical support in PICTs can be strengthened, leading to better patient outcomes. However, findings from the 2022 workforce survey highlight the need to:
 - a. support governments to strengthen the biomedical workforce through the activities listed above;

- b. provide technical support for the biomedical workforce through the development and provision of in-person and online training in local languages, and access to training opportunities leading to formal qualifications;
- c. ensure that any biomedical equipment procured for donation meets country regulatory requirements and technical specifications, and includes provision for installation/training/maintenance, where appropriate.

4.5 Managing COVID-19 in PICTs – Kiribati deployment

Presenters: Dr Lamour Hansell, SPC; Dr Tekeua Uriam, Kiribati

- 79. A repatriation flight brought COVID to Kiribati in January 2022. The government ordered a lockdown and requested support. SPC responded in collaboration with DFAT and sent a team with expertise in clinical anaesthesia, infection prevention and control (IPC), laboratory and biomedical issues, and public health.
- 80. The team provided training in critical care, including administration of oxygenation therapy, IPC support, data analytics and laboratory capacity.
- 81. Challenges included staff shortages due to illness, and lack of training in operating the medical equipment in place, access to pharmaceuticals, and infrastructure for isolation of COVID cases.

Future directions

- i. Support the deployment of Pacific Emergency Medical Teams during PICT disasters/crises and health emergencies.

Clinical area

- i. Support anaesthesia/ICU and postgraduate critical care training for medical/nursing staff.
- ii. Assist with the recruitment of an anaesthetist/ICU specialist for Kiribati.
- iii. Assist procurement of high-flow nasal cannula equipment (Airvo 2/Optiflow).
- iv. Assist ongoing preparedness and system strengthening for future outbreaks.

Recommendations for development partners

- i. Continue to strengthen collaboration with partners to support deployment of teams to assist in emergencies in the region.
- ii. Provide technical support where needed and as requested.

4.6 Triple disaster in the Friendly Islands

Presenters: Dr 'Ana Akau'ola and Tilema Cama, Acting Chief Nursing and Midwifery Officer, Tonga

- 82. The Tonga Hunga-Tonga-Hunga-Ha'apai volcanic eruption in January 2022 was followed by a tsunami and ashfall. The disaster damaged or destroyed housing, infrastructure including roads and the submarine cable, agriculture, forestry and fishing. Ash affected almost all Tongans, including Tongatapu residents, and contaminated water supplies. Three people died in the disaster. COVID cases were found two weeks after the eruption.

83. The Tonga Emergency Medical Assistance Team (TEMAT) was deployed immediately to provide assistance after the eruption. Their work included full evacuation of two islands.
84. To date, there have been 16,182 confirmed cases of COVID-19 in Tonga and 12 deaths. When the first cases occurred, Tonga already had high COVID vaccination coverage and health workers trained to address COVID. Community outreach covered all Tonga and there was good engagement with partners and ministries. The response to COVID included psychosocial support. Police and soldiers supported health workers and student nurses also stepped up.
85. Key lessons from the triple disaster included the need for resilience, teamwork and collaboration.

4.7 Q and A

86. Dr Tudravu, Fiji, asked whether Kiribati and Tonga already had COVID diagnostic capability (PCR or RAT) or did they acquire it after COVID arrived. Fiji is planning to digitise its expanded programme on immunisation (EPI).
87. The Chair responded that Tonga already had capability for PCR testing. The laboratory was commissioned in July 2020 before repatriation of citizens began. Kiribati confirmed that it developed GenExpert testing in 2020.
88. Dr Berlin thanked the development partners who had supported deployment teams, noting that for the first time, the SPC and AUSMAT teams travelled on the same flight, entering the country as one team.
89. Dr Motofaga noted that biomedical capability was a 'yoyo' and asked countries if they wished to make a recommendation, given they had an influx of equipment after COVID.
90. Dr Mahmoud, WHO, said there were many gaps in HR for health, and policies and strategies might need to be updated.

5 Clinical governance

5.1 National Surgical, Obstetric, and Anaesthesia Planning (NSOAP) in the Pacific Islands and in Tonga

Presenters: Dr Lisiate Ulufonua, Consultant, Sydney, and Dr Rennie Qin, Research Fellow, Harvard Medical School

91. In 2019, PHMM championed a Pacific approach to advancing safe and affordable surgery as essential to UHC and the Healthy Islands vision. Since 2020, five PICTs – Fiji, Tonga, Vanuatu, Cook Islands, and Palau – have been developing NSOAPs and implementing initiatives to strengthen their surgical systems. Technical and funding support has been provided by RACS, SPC, WPRO and the Harvard Program for Global Surgery and Social Change.
92. The COVID-19 pandemic highlighted the importance of robust health systems and the synergy between surgical system strengthening and pandemic preparedness, e.g. improved intensive care capacity, oxygen supply, and infection prevention and control.
93. The five countries have made progress on their NSOAPs despite COVID. Fiji and Tonga have held national stakeholder consultations and Vanuatu is planning a meeting. Tonga's NSOAP draft has undergone a final review and will be published shortly.
94. In addition to NSOAPs, PICTs need radiology, biomedical capacity, etc. Governments and partners need to join forces to ensure adequate resources.

95. Dr Ulufonua gave an update on the status of Tonga's NSOAP document (156 pages) and acknowledged the contribution of partners and clinicians, particularly Dr Kiki Moata, who provided valuable guidance on workforce development. Medical administrators know there are many plans and too few resources, but NSOAPs can be incorporated by adjusting systems.

Recommendations for governments

- i. Develop strategic and action plans for surgical system strengthening towards the Healthy Island Vision.
- ii. Develop intersectoral collaborations for safe, affordable, and timely SOA care, for example, by improving transport for hard-to-reach populations.
- iii. Integrate the collection of core surgical indicators into health information systems M&E.
- iv. Work with stakeholders to identify targeted areas for action to improve safe and affordable SOA care that synergises with pandemic preparedness and climate resilience.

Recommendations for partners

- i. Support the development and implementation of country-led strategic plans for surgical system strengthening.
- ii. Coordinate budget, activities and programs with priorities and strategic areas specified by PICTs in their NSOAPs.
- iii. Facilitate regional collaboration and cross-country knowledge sharing of innovation and best practice.
- iv. Facilitate collaboration across specialties, professions and sectors to strengthen the whole ecosystem around SOA care.

5.2 Roadmap for Infection Prevention and Control (IPC) in the Pacific

Presenters: Margaret Leong, IPC Adviser, Clinical Services Programme, PHD, SPC, and Dr Maake Tupou, O&G Consultant and Head of Department, Vaiola Hospital, Tonga

96. The IPC roadmap is based on WHO's recommendations on core IPC components: a functional national and healthcare facility level IPC programme, national IPC guidelines, IPC education and training, healthcare-associated infection (HAI) surveillance, multimodal strategies, monitoring/audit of IPC practices and feedback, and supporting the built environment, materials and equipment for IPC.
97. The Doherty Institute, Melbourne University, was engaged to provide technical support to PICTs to strengthen hand hygiene programmes and HAI surveillance, especially of surgical site infections (SSI) following Caesarean sections.
98. National IPC guidelines were strengthened and workplans were developed. Thirty-four PICT IPC focal points were trained as 'gold standard auditors' who are now able to train auditors in their countries
99. The programme's challenges included border closures and limited IPC supplies.
100. Dr Tupou described Tonga's system of surveillance for births, noting that caesareans make up two-thirds of Tonga's surgery. Experts are surprised at the low rate of SSI following caesareans in Tonga. According to WHO, one in ten patients will get SSI but this is not the case in Tonga. Its protocol includes giving antibiotics before a caesarean and applying a Savlon solution after surgery.
101. The IPC programme has helped Tonga by defining SSI and providing tools, including data collection and an evidence base for further improvements.

Recommendations for governments

- i. Continue to support IPC by strengthening and supporting IPC leadership and programmes at the national and healthcare facility level.
- ii. Support facility-based HAI surveillance to detect HAI outbreaks before they occur, including AMR surveillance.
- iii. Support full implementation of national IPC guidelines by monitoring IPC practice.
- iv. Support mandatory IPC education for all health care workers.

Recommendations for development partners

- i. Continue to provide support for IPC in PICTs, including workforce strengthening. Support PICTs with IPC resources, equipment and supplies.
- ii. Support face-to-face mentoring and training for IPC focal points.

5.3 Collaborative approach to improving clinical governance and clinical leadership at the National Referral Hospital (NRH), Solomon Islands

Presenters: Dr Rooney Jagilly, NRH, Solomon Islands; Dr Kate Kelly, Royal Australasian College of Medical Administrators (RACMA)

102. Solomon Islands' NRH requested support for clinical governance in 2018. Three expert volunteers from Australia and New Zealand made three visits, first to scope immediate and future needs, then to identify concerns and opportunities, and lastly to provide clinical leadership training and implement a clinical governance committee.
103. IPC and fire safety/water access were the immediate issues identified. Next steps included putting in place governance structures and processes, and responding to wider issues such as absenteeism, procurement and infrastructure.
104. Workshops in 2018 and 2019 helped to better understand NRH needs and to match clinical leadership with local expertise. There is strong support for more workshops for NRH, with preferred topics including:
 - implementing a clinical audit process
 - behaviour change
 - clinical quality improvement
 - managing and reviewing a clinical incident
 - using data to improve patient outcomes.

Recommendations for governments and development partners

- i. Where they do not currently exist, consider developing whole-of-country clinical governance frameworks, quality and safety monitoring systems, and approaches to recognising and resourcing clinical governance roles. This would provide policy clarity for issues that affect the whole country, and reduce duplication and ensure consistency.
- ii. A collaborative approach to needs analysis and training is essential.

Comments

105. Australia said there are already standard operating procedures, hand hygiene protocols etc. and asked if people understood why they should implement change.

106. Dr Ulufonua said there are not many SSI cases in Tonga. People accept advice from SPC and WHO. Tonga's procedure using Savlon works.
107. French Polynesia asked about the work of the HR department in Solomon Islands and whether they had identified issues for the health including mental health of health workers.
108. Dr Mahmoud, WHO, noted the importance of IPC for patients and health workers, and asked if there are IPC committees in hospitals as part of the IPC structure.
109. Dr Kafoa, on behalf of Margaret Leong acknowledged the work of IPC focal pts in PICTs.
110. Nauru stressed the need to provide pathways for students who studied abroad and to facilitate their transition into their own countries' medical systems.

6 UHC and primary care

6.1 Regional Clinical Services Programme (CSP) update

Presenter Dr Lamour Hansell, SPC

111. CSP, one of PHD's four programmes, contributes to convening regional meetings of health leaders, supports capacity building, and runs a regional helpdesk to respond to requests from PICTs (173 requests to July 2022). Some of CSP's work has been described in other presentations, e.g. IPC and AMR; work with RACS and the Harvard Global Safe Surgery Programme on NSOAPs; deployment of a team to Kiribati to assist with anaesthesia, critical care, etc. during the pandemic; and sepsis research). CSP provided training on Hamilton ventilators for 11 PICTs and biomedical technical assistance for 3 PICTs.
112. SPC and RACS collaborate to support perioperative and critical care nursing training for 11 PICTs. CSP also supports Pacific clinical and nursing networks. A volunteer researcher/analyst has just been recruited through the Australian Volunteer Programme.
113. Recent challenges for CSP's work include travel restrictions that have necessitated virtual training – a problem for students without reliable wi-fi. Some candidates do not complete their training because of the pressures of competing work and no dedicated study time. Those who do complete their training need to be recognised and incentivised.

Recommendations for governments

- i. PICTs continue to work in collaboration with SPC, e.g. co-funding of activities to strengthen ownership of commitments.
- ii. Raise health workers' awareness of the processes for requesting SPC support through Directors of Health or Directors of Clinical Health Services or Medical Superintendents.
- iii. Political will and leadership to advocate for and support clinical services and nursing priorities.
- iv. Strengthen biomedical capacity and support, including repair and maintenance.
Nursing priorities
- v. Continue support for nursing education and specialisation, e.g. allowing study time, study space.
- vi. Establish and/or strengthen career pathways for nursing specialisation e.g. critical care, emergency nursing and perioperative nursing.
- vii. Investment in IPC by strengthening and supporting IPC leadership and programs at the national and healthcare facility level.

Recommendations for development partners

- i. Provide more flexibility in funding. CSP programmes are demand driven, and PICT requests can be variable and out of the context of allocated projects and activities.
- ii. Allocate budgets for health emergencies and deployment funding.
- iii. Continue to support PICTs priorities for clinical nursing and IPC, both regionally and nationally.
- iv. Provide ongoing support for workforce strengthening, service delivery and improving the quality of clinical nursing and IPC services.
- v. Support biomedical capacity in PICTs.

6.2 Strengthening critical care capacity – Nauru’s experience

Presenters: Bethan Price, Pacific Critical Care Education Consultant, Darwin, Australia; Cherish Duburiya, Principal Training Manager, Republic of Nauru Hospital, Nauru

114. The National Critical Care and Trauma Response Centre (NCCTRC) in Darwin, Australia, has been working in partnership with SPC since November 2020. Together they have developed programmes to support existing critical care nursing throughout the region. The COVID pandemic demonstrated the need for increased capacity to manage critically ill patients in PICTs. In 2021–2022, seven training sessions were delivered remotely to five PICTs. One face-to-face session was delivered in Nauru in April 2022.
115. In consultation with local staff, clinical guidelines and SOPs were developed to support the COVID-19 response in five PICTs.
116. Coaching and mentorship are being delivered in Fiji and Nauru.
117. Challenges: The only option for formal postgraduate critical care training for nurses is the graduate certificate available through the Australian College of Nursing (online). Internet reliability and the cost of IT resources are barriers for many students.
118. In early 2021, Nauru implemented a ‘train the trainer’ programme for health workers involved in COVID care. Attendees included the critical care team, public health nurses, midwives, allied health staff and ambulance drivers.

Recommendations for governments

- i. Provide leadership at ministry level to prioritise critical care development. Formalise partnerships with organisations to ensure support for developing nursing leaders.
- ii. Continue support for nursing education and training in critical care through both short courses and postgraduate study.
- iii. Strengthen/develop career pathways for critical care nursing specialisation, including providing protected time for study and training.

Recommendations for development partners

- i. Continue to support PICTs’ priority clinical nursing needs, both regionally and nationally.
- ii. Provide ongoing support for workforce strengthening, service delivery and high-quality clinical and nursing services.
- iii. In addition to virtual learning, provide face-to-face learning with clinical support and exchange programmes and mentoring.

6.3 Journey of perioperative nursing in the Pacific

Presenter: Natasha Mamea- Maa, Senior Nurse Specialist, Samoa, and President, Pacific Islands Operating Room Nursing Association (PIORNA)

119. Perioperative nursing has developed in PICTs over the last six years, with achievements including publication of perioperative standards (three bundles) and establishment of wider networks.
120. After variations in perioperative practices were reported by RACS, collaboration between RACS and the Australian College of Perioperative Nurses (ACORN) assisted in adapting standards to Pacific conditions. Expert perioperative nurses from PICTs worked with Australia to make sure the standards were appropriate.
121. PIORNA was officially recognised as a society in 2019 and has full membership of the International Federation of Perioperative Nurses. Among its functions, PIORNA provides mentors for Pacific nurses.
122. Challenges: Remoteness is a problem as is the diversity of facilities in small PICTs. Maintaining nursing skills for rarer operations is difficult. Reliable internet is needed for online training.

Recommendations for governments

- i. Support more scholarships to enable Pacific nurses to undertake postgraduate studies in perioperative nursing.
- ii. Support the development of hospital-based learning centres with reliable internet services for online learning and access to continuing professional development.
- iii. Support exchange programmes for perioperative nurses to help maintain and upgrade their nursing skills.

Recommendations for development partners

- i. Support mentorship programs with perioperative experts from Australasian colleges/facilities to build local capacity.
- ii. Support the development of PIORNA, e.g. through guidance from ACORN.

6.4 Q and A

123. Dr Kafoa, responding to a question from Nauru, said SPC does not provide scholarships but sometimes provides support where countries have no funds. In response to comments from Fiji and French Polynesia, Dr Kafoa agreed that a reliable 'digital backbone' is essential for health services. However SPC has no specific funding for improving the network. It does support online access, e.g. through provision of laptops.
124. Australia said its nurses appreciate the opportunity to work with Pacific nurses. Collaboration is powerful and Australia is always willing to participate.
125. Dr Fatupaito, Samoa, acknowledged the support of partners including AUSMAT, especially during the measles epidemic.

6.5 Developing a trauma management upskilling plan for the Pacific

Presenters: Dr Shaun Mauiliu, Orthopaedic Consultant, MoH, Samoa, and Director, PIOA training; Dr Desmond Soares, Orthopaedic Consultant, Brisbane, and Deputy Director, PIOA training

126. The Pacific Islands Orthopaedic Association (PIOA) has developed a training module for the Pacific. The four-year programme has produced five graduates to date and is involved with eight PICTs with hopes to expand to others. Trainees stay in their own country but get mentoring and supervisory visits.

127. Orthopaedic trauma is common in the Pacific (e.g. femur fractures), and management varies greatly in PICTs, with most lacking enough trained orthopaedic surgeons or expertise in techniques such as nailing rather than plating, which quickens recovery.

Future directions and recommendations

128. PIOA is dependent on funding. To date, PIOA training has been funded by donors at a cost of USD 150,000 per year (airfares, accommodation, and support for trainees and lecturers for six weeks a year). All lecturers provide their time for free. There is a need for SPC and governments to step up and accept the costs of training their own staff (USD 6000 per student per year).
129. **Equipment – minimum needs for regional and district hospitals**
Every district hospital should have a doctor capable of providing basic orthopaedic care, including management of closed fractures, and debridement and stabilisation of open fractures (preferably with an external fixator or at minimum with a cast). This means every hospital needs access to x-ray services, plaster supplies and a simple ex-fix set.
130. Minimum trauma systems for regional hospitals include small fragment and large fragment fixation sets, intramedullary nail sets, titanium ElasticNails nail sets and external fixations sets and specialised sets (hand, wrist), locking plates (distal femur, tibia, humerus, elbow and wrist), cannulated screws (4 mm, 7 mm), hemiarthroplasty for subcapital fractures and bone cement. Regional hospitals also require an image intensifier or the PIOA-designed equivalent digital x-ray C arm (one-third of the cost and much more robust).
131. Once trauma needs are being met, PICTs need to consider how to provide reconstructive services such as joint replacement. Some countries (e.g. Fiji) have been sending citizens to India for such surgery at greater cost and with significant risks such as introducing MRSA in returning patients.
132. PIOA will be performing a detailed study in partnership with the Harvard Global Orthopaedics Collaborative to assess current workloads, human resources and future needs.
PIOA will continue to advocate for quality orthopaedic trauma services to ensure Pacific people have an opportunity to make the best recovery possible following accidental or traumatic orthopaedic injury.

6.6. Biomedical support and country experience – Cook Islands

Presenter: Dr Yin Yin May, Director of Hospital Services, MoH, Cook Islands

133. Cook Islands has an 80-bed hospital in Rarotonga and a 32-bed hospital in Aitutaki. Primary health care centres are run by nurses. Currently, there are two biomedical technicians, both from the Philippines, who support diagnosis and treatment by installing, testing, calibrating and repairing biomedical equipment; training users; maintaining safe operations; and making recommendations on possible additional equipment.
134. SPC has arranged through partners to provide equipment to Cook Islands. The GeneXpert machine has had several benefits, including for travel, and is much more efficient than using overseas laboratories. RAT kits (MFAT funded) also reduce lab workloads. In-country COVID testing helped contain community spread. In addition, 98% of everyone above 12 years has been vaccinated, with the New Zealand government providing Pfizer vaccine.
135. Border closure disrupted life and the economy and also affected the patient referral system and procurement of pharmaceuticals and other supplies.

6.7 Laboratory quality assessment.

Presenters: Asaeli Raikabakaba, Technical Officer, Division of Pacific Technical Support, WHO Suva, and Dr Eka Buadromo, Senior Laboratory Adviser, PHD, SPC

136. Improved laboratory services are part of achieving UHC. The performance of PICT laboratories is assessed regularly using the WHO Stepwise Laboratory Improvement Towards Accreditation (SLIPTA) audit tool. Thirteen PICTs responded to a recent brief assessment of progress: 11 reported average infrastructure; 13 had areas for improvement in implementing strategies; and 7 reported partial implementation of quality management. Two laboratories scored higher ratings.
137. Dr Buadromo described the laboratory quality management system (LQMS), which includes 12 essential elements that must all perform well. Efficient lab systems provide critical support for clinicians and patients.
138. PICTs were asked to endorse their LQMS policies and update them if necessary. Some countries have strategic plans that also need updating.
139. Dr Buadromo congratulated the Fiji and Tonga laboratories, which achieved 5-star ratings and are now ready for ISO assessment.
140. Challenges include lack of resources, especially quality managers (some staff have a dual role).

Recommendations for countries

- i. MoH administrators to advocate at the national level for recognition of the vital role of laboratory services in both clinical settings and public health programmes, and support LQMS implementation and continuous improvement of the quality of laboratory services in PICTs.
- ii. MoH to develop, update and endorse national laboratory policies initially developed in 2010–2012.
- iii. Note that an interim Pacific Island laboratory standard using the SLIPTA assessment tool is to be developed and accepted as the standard for PICTs that do not yet have appropriate infrastructure for ISO accreditation.

Recommendations for partners

- i. Provide and/or support technical assistance to member states to strengthen LQMS implementation, development of laboratory standards and conduct of SLIPTA/LQMS standard assessments.
- ii. Note that a dashboard of PICT laboratory performance is to be presented to MoH administrators to increase awareness of the quality of laboratory services and the further assistance that may be needed.

6.8 Q and A

141. Palau noted its shortage of specialists on island, e.g. there are no orthopaedic surgeons and no pathology services. Palau wants to increase its capacity and welcomes hearing about opportunities to develop specialist services and also telehealth, given that the country was isolated during the COVID lockdown.
142. Dr Natuman, Vanuatu, said (1) Vanuatu was interested in in-country training for orthopaedics; (2) asked if the course was accredited; and (3) if there was a package available that informed countries of all the training available, rather than countries making individual approaches to agencies.
143. Dr Kafoa invited Palau to request support from SPC. He said SPC could work with other agencies to put together a package of available training, perhaps using SharePoint.

144. Dr Wilson, FNU, confirmed there had been discussion with PIOA on accreditation. FNU does not have an orthopaedics program currently and considers it should be a subspecialty. FNU will continue the discussion with PIOA and also with the Fiji Medical Council.
145. Dr Tudravu noted the progress of LQMS and said quality assurance for radiography was also needed. He acknowledged the New Zealand government and officials for allowing patients, including children with heart conditions, to enter during COVID border closures.
146. Dr Mahmoud noted that WHO and SPC had coordinated to support labs during the pandemic. This investment in labs, and updates to the regional referral system and networking should all continue.

6.9 UpToDate access for PICTs, and the Kiribati experience

Presenters: Douglas Benjamin, Wolters Kluwer; Dr Tekeua Uriam, Kiribati

147. UpToDate is the world's leading clinical decision support resource, used by over 2 million clinicians in 191 countries. The content is written by leading experts, is blind peer reviewed and updated daily. It gives doctors access to evidence-based information for diagnosis and treatment at the point of care. In Australia, 95% of doctors use it; 100% of New Zealand doctors have access to it. UpToDate reduces diagnostic errors and may change decisions (up to 37% of the time).
148. Pacific universities are using UpToDate and students are familiar with it. The system is web based so it requires Wi-Fi but can be used offline. Wolters Kluwer provides training in using the app and is supporting implementation in Kiribati, with help from SPC.
149. Dr Uriam said medical graduates know the value of UpToDate, especially in isolated settings. The MoH was not supportive of purchasing the app so Kiribati approached SPC and got access in two months. The many benefits include information on drug interactions – a helpful feature for nurses on outer islands. UpToDate pathways allows customisation for patients and it assists decisions on overseas referral.
150. Challenges include funding, training and connectivity.
151. Next steps: Wolters Kluwer and SPC will continue to support the region, including through evaluation of UpToDate usage to identify trends/development opportunities.

6.10 Australian Volunteer Programme (AVP)

Presenter: Ruth Lancaster, Partnerships Lead, AVP

152. AVP (<https://www.australianvolunteers.com/>) partners with organisations in 26 countries across the Indo-Pacific region. Partner organisations include NGOs, government agencies, educational institutions, the private sector and social enterprises (SPC and FNU are both partners). AVP is 60 years old and comes under DFAT.
153. AVP emphasises locally led development and an M&E team measures progress. Volunteers are provided with a small allowance, travel costs, etc., allowing them to focus on their assignment and working relationship with colleagues.
154. Key management actions for 2022–2023 include:
- i. supporting partner organisations to recover from the impacts of COVID-19 and strengthening their capacity to deliver positive change. This includes maintaining AVP's remote volunteering initiative;
 - ii. investing in partnerships with Australian organisations;
 - iii. expanding AVP's innovation capability to develop additional volunteer modalities and support programme resilience, including by testing new ways to support volunteering at the local level;
 - iv. elevating work on gender equality, disability and social inclusion, and Indigenous inclusion.

6.11 National Guidelines host app

Presenter: Mieke Hutchinson-Kern, Therapeutic Guidelines Foundation

155. The National Guidelines host app offers free access to Australian guidelines and supports development of local guidelines. It also supports implementation. App costs are shared with Therapeutic Guidelines, which pays all costs for the first two years. Then the country MoH decides whether to continue and take over part of the costs (there are cost benefits for using online rather than printed guidelines).

Recommendations for governments

- i. Consider whether a Guideline Host app would improve use of medicines in your context, based on the experiences in Fiji, Solomon Islands and Vanuatu where Guideline Host:
 - makes it easy for healthcare practitioners to access locally relevant clinical information at the point-of-care;
 - provides data on guideline usage to better inform guideline implementation, training and monitoring activities.
- ii. Consider whether there are additional features that could be added to improve the Guideline Host app user experience, or other information that could be captured to make usage data more relevant for MoHs.

Recommendations for development partners

For partners supporting development of guidelines or other clinical resources in a country with an existing Guideline Host app:

- i. consider whether the resource should be added to the app early in the development process and initiate communication with the National Medicines and Therapeutics Committee or equivalent;
- ii. consider including funding for addition of the resource to the app in the development budget.

6.12 Q and A

156. PICTs asked if the Guidelines Host app is available only in English; does SPC have a list of all PICT guidelines; and is AVP linked to SPC.
157. Dr Kafoa responded that SPC can provide a link to the app so PICTs can explore its usefulness. SPC can put PICTs in contact with AVP's Suva office or their own country office.
158. Cook Islands has subscribed to UpToDate for 15 years at a cost of USD 8000 per year. If SPC is subsidising UpToDate for Kiribati, could it assist other PICTs.
159. French Polynesia plans to request access to UpToDate and could jointly fund and share it with Cook Islands (depending on conformity with access conditions).
160. Samoa's access to UpToDate is fully funded by a donor. The whole hospital has institutional access.
161. Dr Kafoa said SPC is funding access for Kiribati for two years only. If UpToDate is a regional good, SPC could perhaps co-fund it with regional universities to widen regional access (talks are underway).

7 Pacific clinical and nursing networks

7.1 Developing radiology services in the Pacific

Presenter: Dr Akauola, Tonga

162. The Pacific Radiology Society Incorporated (PRadSI) was established in 2019. Its aims include providing leadership, supporting capacity building, developing networks, and forming links with international radiology groups.
163. Radiology is one of the least developed fields of medicine in PICTs and is still viewed as a support service in most PICTs, even though imaging is central to diagnosis.
164. FNU does not offer a masters in radiology. PNG offers a four-year masters, but most candidates would prefer to study in Fiji. Radiology Across Borders (RAB) and the University of British Columbia offered a one-year online course (International Certificate in Radiology Fundamentals) for developing countries in 2021. Twenty-three PICT representatives passed. In 2022, 21 SPC-supported PICT radiology doctors and imaging technologists are enrolled.

Future directions for governments

- i. Support radiology training to masters level for PICTs, preferably in Fiji.
- ii. Strengthen PICT radiology services by procuring appropriate and sustainable equipment.
- iii. Support training for biomedical engineers to support the expensive equipment used in imaging.

Future directions for development partners

- i. Advocate for radiology training in the Pacific.
- ii. Seek ways in which the few radiologists working in the Pacific can establish a link to the Royal Australian and New Zealand College of Radiologists, similar to the RACS model for surgery.
- iii. Support the work of Radiology Across Borders, which is providing educational opportunities for Pacific doctors and imaging technologists at minimal cost.

7.2 Oceania Society for Mental Health Professionals (OSMHP)

Presenter: Dr Jimmy Obed, Consultant Psychiatrist, Vanuatu

165. OSMHP was established in 2017 with a focus on quality mental health services, knowledge and practice, upskilling, networking, professional development and collaboration, and research. In June 2018, a TWG met to approve a CPD framework for the region, which was endorsed by the Fiji Medical Council in 2021.
166. Mental health services continued during the pandemic (high demand but low resources) and members attended regional conferences and webinars.
167. Challenges include stigma, lack of resources, limited training, and few allied mental health professionals.

Recommendations for governments

- i. Make a serious financial commitment to boost mental health care across the region.
- ii. Create more training opportunities for existing and aspiring mental health professionals.
- iii. Recognise the importance of, and increasing demand for mental health services; OSMHP would like to see mental health included in key health discussions.
- iv. Support mental health professionals offering services.

Recommendations for development partners

- i. Support training opportunities for mental health professionals.
- ii. Engage with OSMHP and governments and mental health organisations to support capacity building in the region.

7.3 Q and A

168. French Polynesia said it was important to train primary health professionals in mental health and asked if the mental health gap programme introduced by WHO still existed.
169. Fiji was using the mental health gap programme but stopped it. It is now due to restart.
170. Dr Mahmoud asked for data on the number of mental health professionals in PICTs.
171. FNU said there had been a discussion with RAB about developing radiology training, but FNU would have to pay \$2 million dollars. Given that PICT Medical Councils do not register those who have the certificate as specialists, it would be better to develop a postgraduate programme. FNU has approved an MMED in psychiatry.
172. Dr Kafoa said SPC is committed to meeting country mandates but does not compromise other regional agencies. SPC invests in international certificates. Those who gain a certificate can go on to university study if they wish.

7.4 Pacific Society of Anaesthetists (PSA) update

Presenter: Dr Kartik Mudliar, PSA President

173. PSA was established in 1989. Initial member countries included American Samoa, Cook Islands, Fiji, Kiribati, Marshall Islands, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. PSA's objectives include advancing the science and art of anaesthesia; facilitating professional education; encouraging exchange of knowledge and research; and safeguarding the professional and legal interests of anaesthetists.
174. Funding comes from registration fees, sponsorship, SPC, RACS and the Overseas Development and Education Committee. FNU, MoHs and the Global Health Committee also provide support.
175. PSA provides refresher courses, CME opportunities, networking and clinical skills training.

Future directions

- i. Commitment to training, supporting, and retaining anaesthesia specialists.
- ii. Commitment to the Lancet Commission on Global Surgery goal.
- iii. Provision for continuous education, professional development, research and teaching.
- iv. Regular review of services to identify areas of need.
- v. Invest in employing and training anaesthetic technicians.
- vi. Explore training options for post-anaesthesia care and ICU nurses.
- vii. Invest in robust and reliable equipment required to run anaesthesia services.
- viii. Ensure continuous supply of drugs and consumables.

7.5 Pacific Ear Nose Throat and Audiology Group (PENTAG) update

Presenters: Dr Sione Pifeleti, MoH, Samoa; Professor Bernard Whitfield, Princess Alexandra Hospital, Brisbane, Australia

176. The Pacific region has a high prevalence of hearing loss and ear conditions and insufficient speciality resources. PENTAG was established in 2015 to develop a conceptual plan for strengthening ENT and audiology services in PICTs. The revised plan was approved by DCS and PHoH meetings in 2018.
177. There has been significant progress in provision of services and training since 2015, e.g. Fiji has recruited its first local ENT surgeon and launched clinical guidelines; Tonga has

established an ENT department and is planning outreach services; Solomon Islands' ENT clinic sees around 8000 patients a year; and Samoa is providing outreach through a mobile clinic, developing an audiology facility, and training nurses, doctors and staff who look after hearing disability.

178. PENTAG continues to support other PICTs and provide training. All PICTs were asked to please provide a PENTAG focal point.
179. PENTAG thanked RACS and DFAT for their support.
180. Professor Whitfield stressed the need for early identification of hearing problems and described Samoa's audiology facility and training curriculum. He encouraged nurses to take the diploma and asked PICTs to consider paying a higher salary to qualified nurses.

Recommendations for governments

To strengthen ENT services and audiology in each PICT, PENTAG requests the following:

- i. Acknowledgement of the role of PENTAG and the importance of a regional approach to strengthening ENT and audiology services in each PICT.
- ii. All PICTs to be involved in and to support ENT and audiology services.
- iii. Nomination of a single point of contact from each country to participate in the communication, design and development of regional capacity building and shared resources for ENT and audiology.
- iv. Government-level recognition of the importance of ENT disorders and ear and hearing health for good health and education outcomes.

Recommendations for development partners

- i. PENTAG recommends continued support for the development of Pacific-led ENT and audiology services, including education and training, and assistance with building research capacity and capability.
- ii. Requests development partners to continue to facilitate access to appropriate equipment, technology and expertise.

[7.5 Sustaining integrated people-centred eye care in the Pacific](#)

Presenter: Dr John Szetu, Medical Director, Regional Eye Centre, Honiara

181. Globally, at least 2.2 billion people have impaired vision. Four out of five people who are blind do not need to be. Diabetic retinopathy is the leading cause of impaired vision/blindness in the Pacific, with PICTs having among the highest prevalence of diabetes in the world. Each dollar invested in prevention of blindness and restoration of sight returns four times that amount to the local economy.
182. Tackling the burden requires a good workforce. The Fred Hollows Foundation works in partnership with medical schools and teaching institutions across the Pacific. These partnerships are guided by MOUs. The foundation has four pillars: restoring sight; training doctors and nurses; strengthening health systems; and innovation and research.

Recommendations/Way forward

- i. MoHs to prioritise eye health, and endorse and implement national eye plans.
- ii. Nominate National Eye Coordinators and allocate funding for eye care.
- iii. Strengthen health systems and leadership.

- iv. Meet WHA targets by 2030:
- v. Programmes and systems are in place
- vi. Support from FHFNZ to ensure Pacific MoHs are ready by 2030 to report back to WHA.

7.7 Q and A

183. Dr Kafoa acknowledged the work of Dr Szetu and the Fred Hollows Foundation, saying it was an example of what PICTs could achieve if they supported PENTAG the same way. He made a plea to Medical Councils to recognise the PENTAG/audiology qualifications.
184. Dr Deki, WHO, said it was important to recognise the number and quality of health workers required to meet demands, and to implement the commitment made at the 12th PHOH meeting.
185. FNU noted it has nurses graduating in emergency nursing.

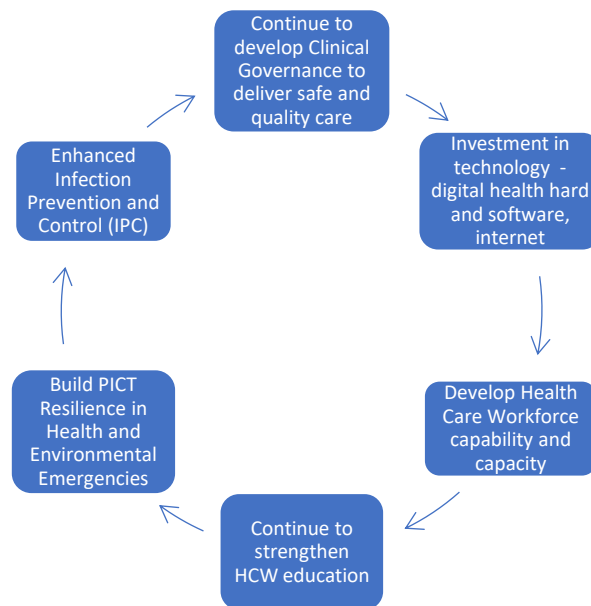
7.8 Close of meeting

Closing address

186. Dr Tearikivao (Kiki) Maoate said the DCS meeting feeds into PHOH and PHMM. It is important that PICTs own the agenda and think about the next five to ten years and the support needed. Workforce issues are critical. It is essential to recognise this is a different era and to ask if universities are properly set up to provide for future needs. Are they fit for purpose? Should education be thinking beyond medical schools to high schools? In terms of nursing – why do we think that perioperative nurses should be specially trained but not primary nurses? NSOAPS needed more strategic intent from DCS. Countries need to know how to get them done. There is excellent work being done in many areas, e.g. IPC, laboratories, eye and ear health. Finally, the meeting showed leadership across the spectrum, from both senior and young participants.
187. The Chair asked Dr Wilson, FNU, to say the closing prayer. She thanked participants for an excellent meeting and wished everyone a safe journey home.

Annex 1: Summary of recommendations of DCS meeting, 29 and 30 August 2022

CORE FOCUS AREAS



WORKFORCE

Develop Health Care Workforce Capability and Capacity

At the Regional Level

- Continue to strengthen HRH management and planning to encapsulate the following:
 - undergraduate and postgraduate training and in-service training
 - planning workforce
 - develop and enhance career pathways
- Standardise regional professional accreditation and pathways so qualifications are recognised across PICTs.
- HRH information with reliable consistent data for future HCW planning.

At the National Level

- Governments to continue to strengthen the existing workforce to encapsulate the following
 - undergraduate and postgraduate training and in service training
 - planning workforce and career pathways
 - Promote and support the health of the workforce.

EDUCATION

Continue HCW education development

At the Regional Level

- Standardise educational training packages and guidelines and share with PICTs

- Provide access to digital evidence-based guidelines
- Acknowledge regional recognition of training and support Regional internship programme.
- Encourage PICTs to use Pacific academic institute programmes. Institutions to have allocated quotas for PICTs.
- Governments to continue to support postgraduate clinical and nursing specialisation, e.g.
 - critical care nursing and allied health
 - radiology, ENT, orthopaedics
- Support biomedical services in PICTs.
- Strengthen IPC education for and across PICTs.

At the National Level

- Maintain/develop internship programmes.
- Government to continue to support training in
 - family medicine
 - generalist training packages that will support nursing and allied health, especially rural health
 - generalists in primary health care
- Governments to support allied health training, e.g. paramedics.

For Development partners to

- Support educational priorities for PICTs: at postgraduate and specialisation level.

INFECTIOUS PREVENTION AND CONTROL (IPC)

Recommendations for governments

- Prioritise hand hygiene and sepsis prevention.
- Continue to support IPC by strengthening and supporting IPC leadership and programmes at the national and health-care facility level.
- Support facility-based Hospital Acquired Infections (HAI) surveillance to detect HAI outbreaks before they occur, including Antimicrobial Resilience (AMR) surveillance.
- Support full implementation of national IPC guidelines by monitoring IPC practice.
- Support IPC education, it should be mandated for all health care workers.

Recommendations for development partners

- Continue to provide support for IPC in PICTs.
- Continue to support the workforce for IPC strengthening in PICTs.
- Support PICTs with IPC resources, equipment and supplies.
- Support face-to-face mentoring and training for IPC focal points.

HEALTH & ENVIRONMENTAL EMERGENCIES

At the Regional Level

- Support EMT from WHO and regional deployment:
 - establish or build on Pacific capability for regional and national responses
- Support Pacific EMT through partners, with WHO as lead and SPC as support.

- Take note of the updates from WHO on COVID-19 and monkeypox
- Support the digital vaccination certification

CLINICAL GOVERNANCE

At the Regional Level, Support strategies for clinical governance, including regional policy.

HEALTH TECHNOLOGY

At the Regional Level

- Support development and strengthening of information ,IT and information capability
- Strengthen digital support for PICTs.
- Support telehealth and tele medicine.
- Commitment from governments and development partners to have reliable and affordable access to the internet

CLINICAL PROGRAMMES AND CROSS CUTTING ISSUES

Regional

- Support NSOAP development.
- Support regional Pacific clinical networks for clinical, nursing and allied health, e.g. education, continuing professional development, etc.
- Support regional laboratory programmes and quality assessment.
- Support programmes that will assist PICTs to strengthen clinical services.
- Support people-centred integrated programmes for PICTs.

Directors of Clinical Services Meeting

Réunion des directeurs des services cliniques

Annex 2

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Réunion des directeurs des services cliniques

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