Infection Prevention and Control in the Pacific Island Countries and Territories

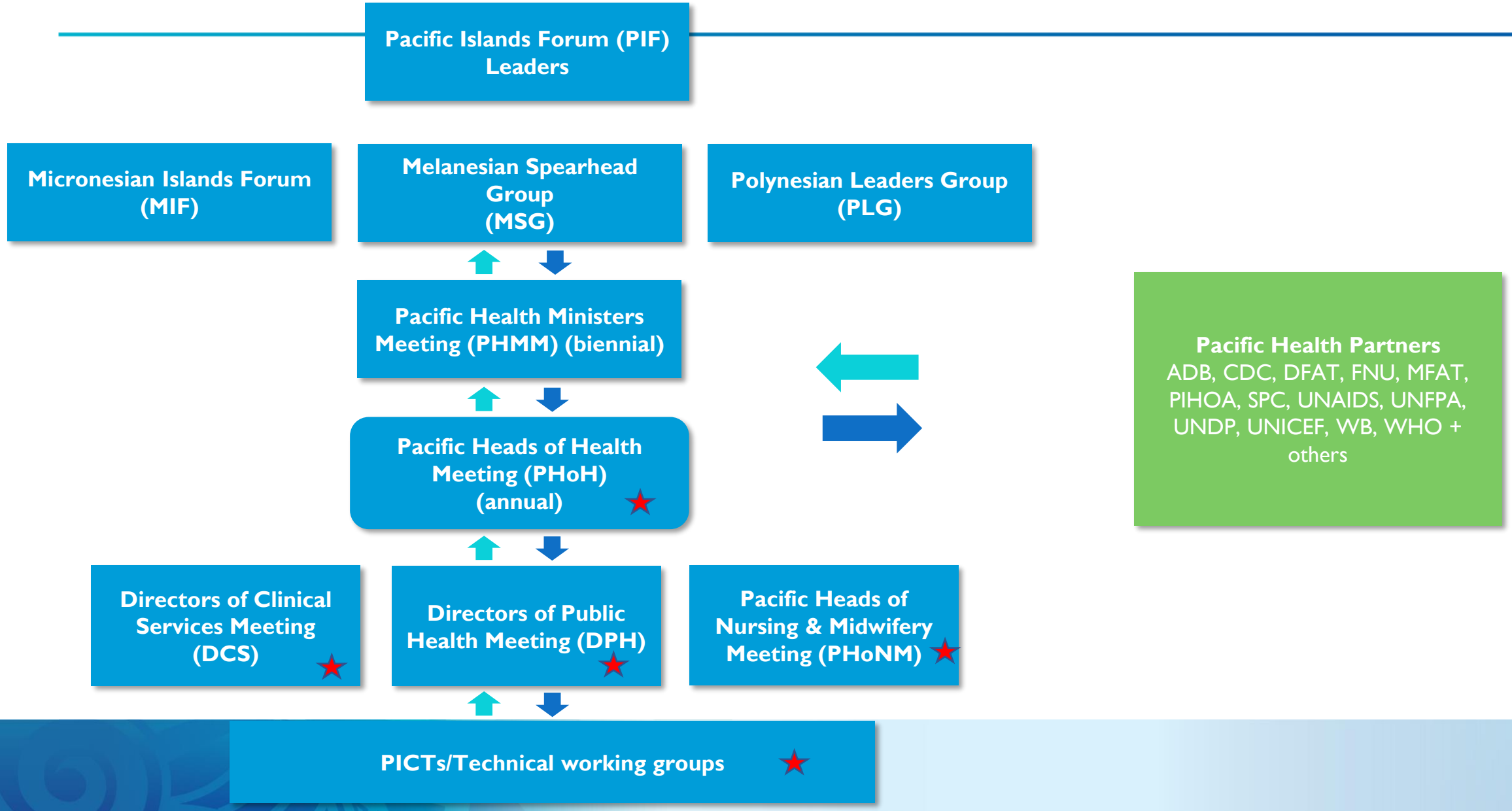
I have no disclosures or conflict

Margaret Leong, IPC Technical Advisor, SPC

Presentation Outline

- The Pacific Community
- Context/background – Role of the IPC Advisor
- Assessment of IPC Capacity against the WHO core components.
- PICNet activities
- HAI surveillance and hand hygiene
- Pacific IPC workforce
- Research
- Future directions

Regional Health Architecture



Background

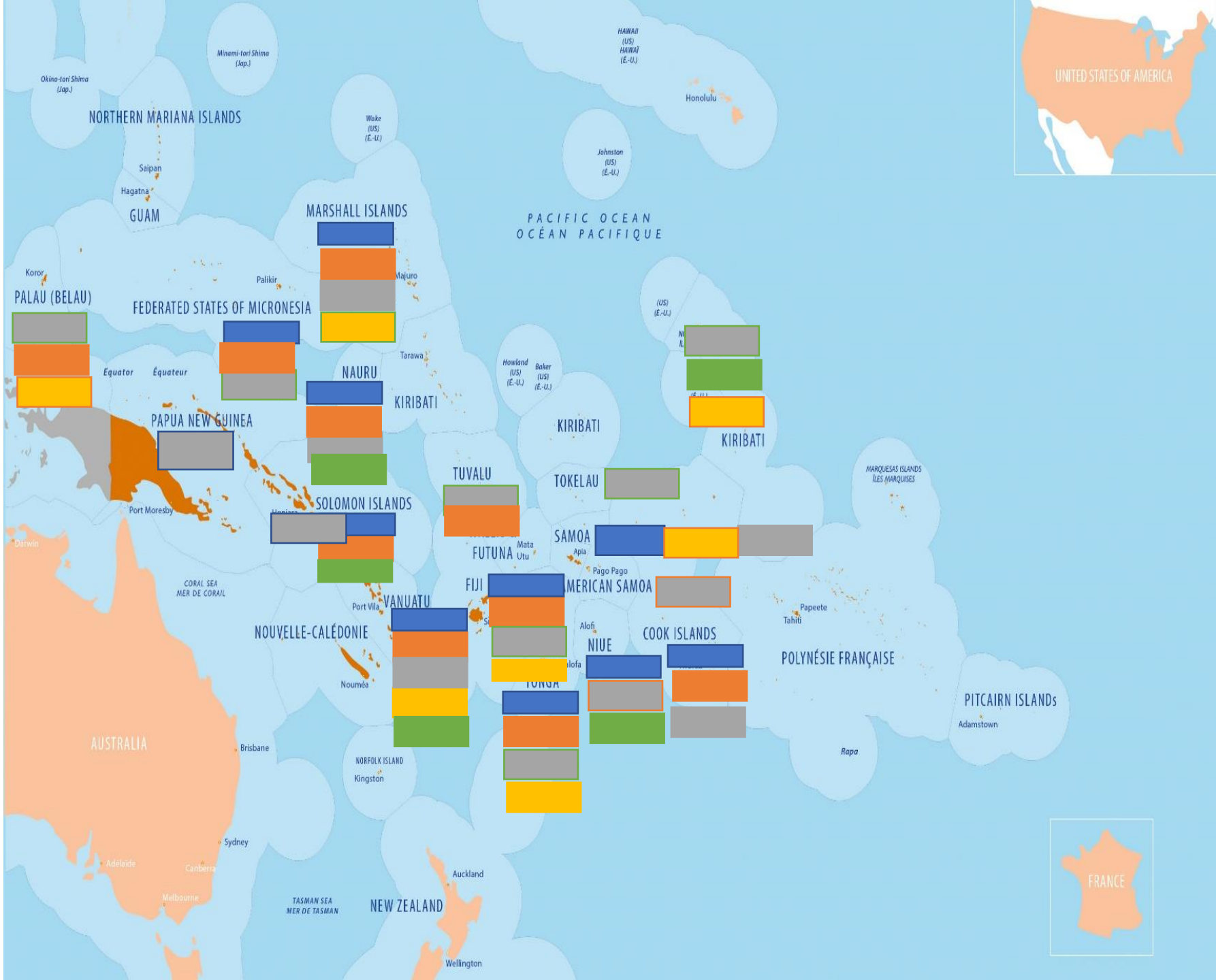
- The Pacific Infection Control Network (PICNet)

- **Role of IPC Advisor:**
  - Enhance policy and institutional environment for IPC.
  - Strengthen national capacity in IPC to better respond to public health disease outbreaks and disease threats.
  - Support surveillance in Healthcare associated infections and antimicrobial resistance.
  - Enhance evidence-based IPC service delivery through research.

Country and regional support to date

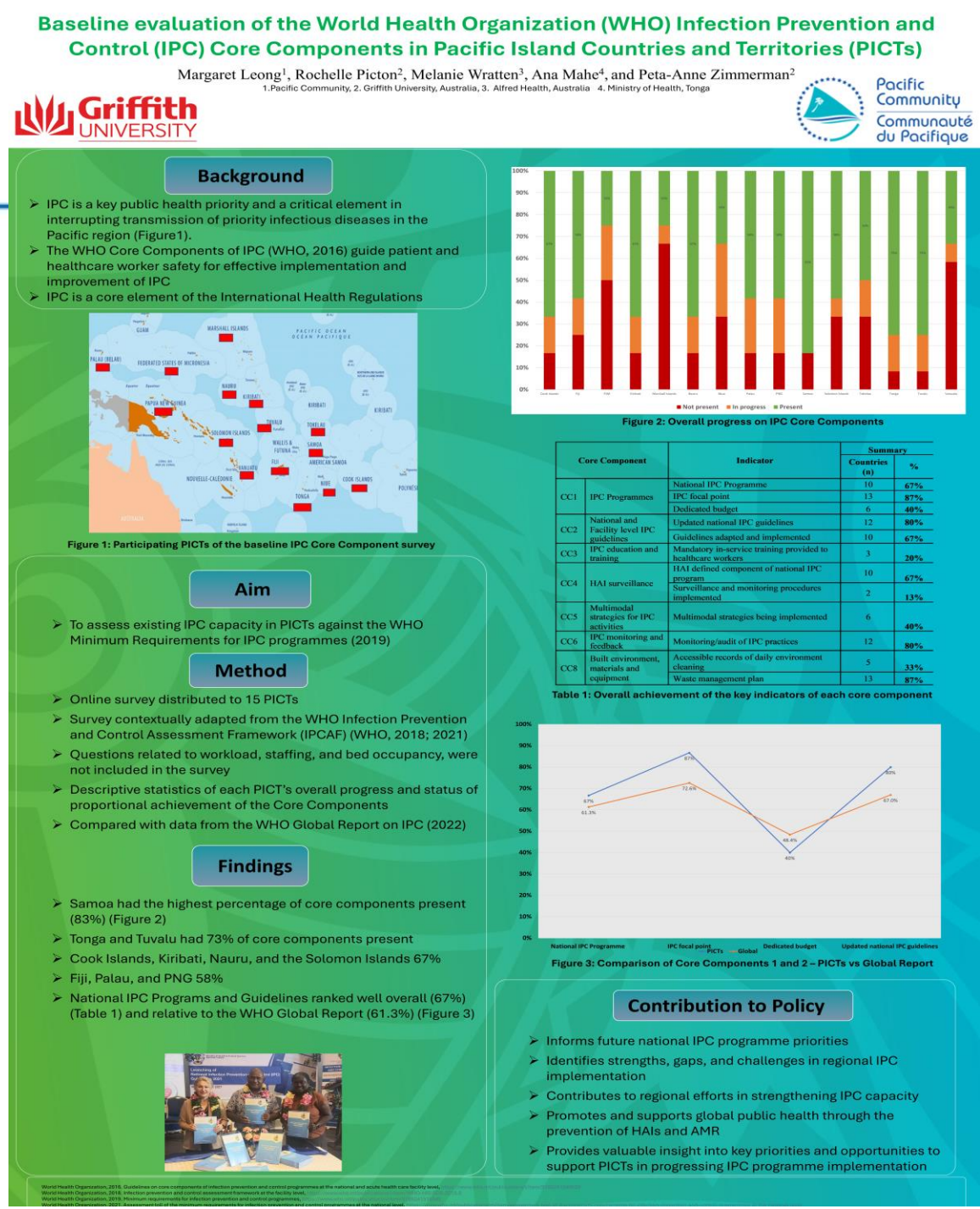
- IPC Support

KRAs	ACTIVITIES
Guidelines	PICTs have national IPC Guidelines
Workplans	IPC Program Plans
Training	IPC Capacity building
Surveillance	Standardized Methodology for SSI
SOPs	Country specific Request

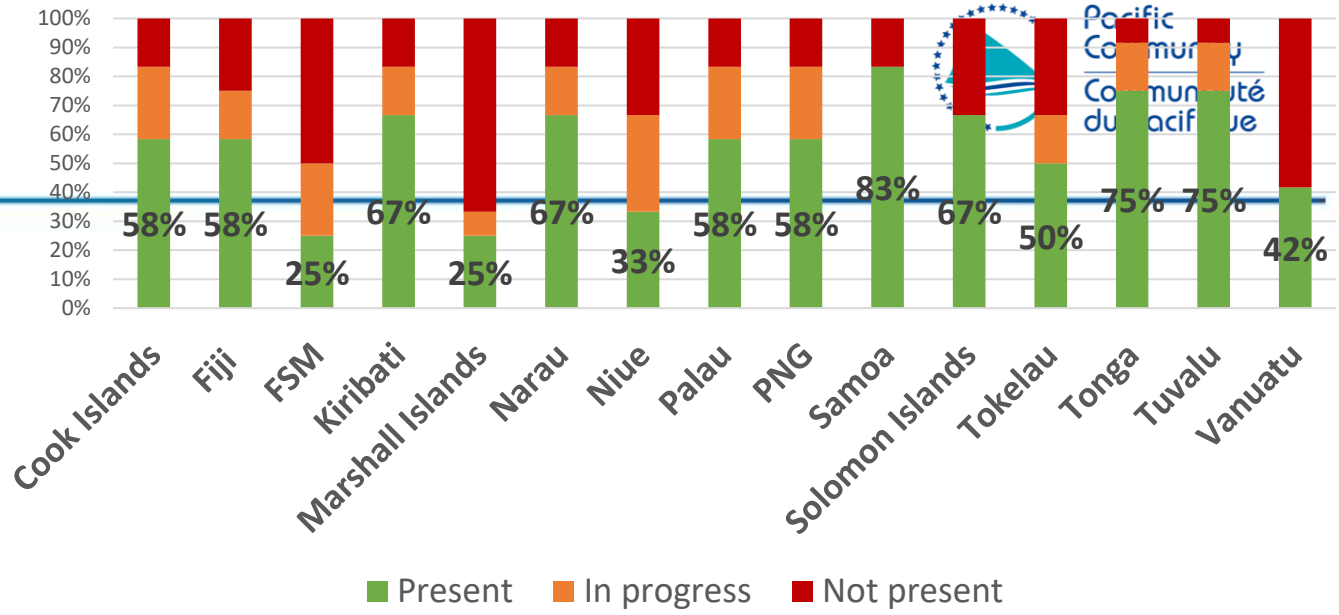


Assessment of existing IPC capacity in PICTs against the WHO core components for IPC programs

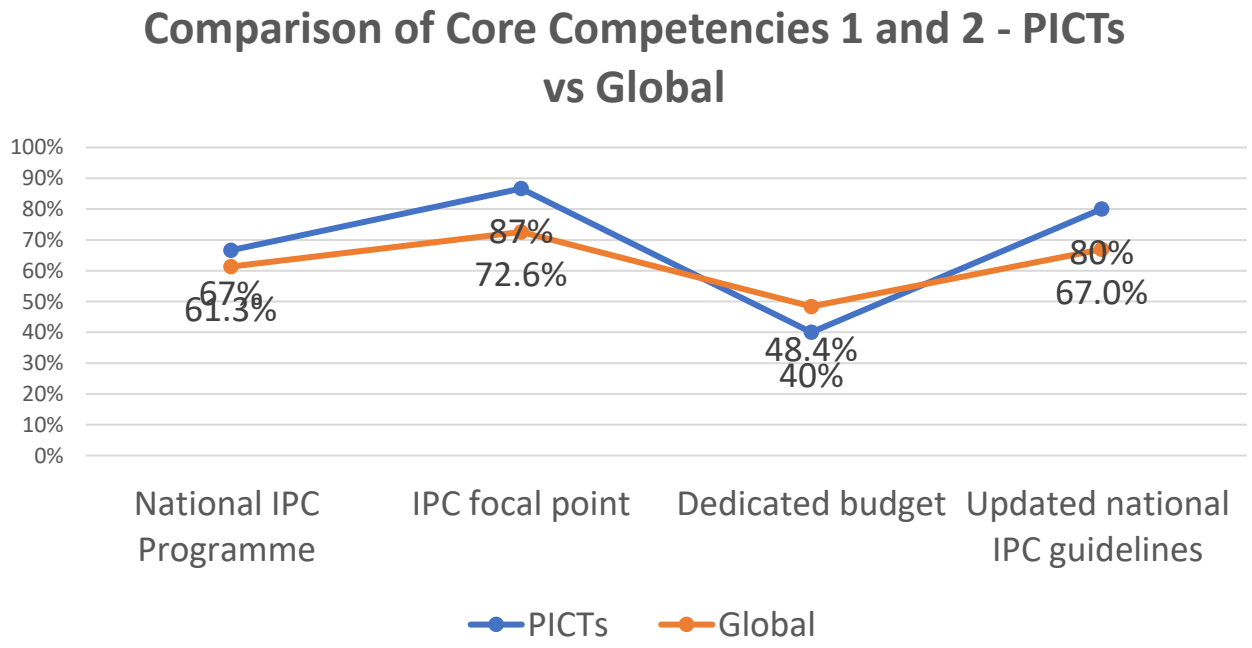
Leong, M., Picton, R., Wratten, M. et al. Baseline evaluation of the World Health Organization (WHO) infection prevention and control (IPC) core components in Pacific Island Countries and Territories (PICTs). Antimicrob Resist Infect Control 13, 108 (2024). https://doi.org/10.1186/s13756-024-01447-9



Results and impacts



- Samoa had the highest percentage of core components Core Components present (83%)
- Tonga and Tuvalu had 73% of core components present.
- Cook Islands, Kiribati, Nauru, and the Solomon Islands with 67%.
- Fiji, Palau, and PNG 58%
- National IPC programmes and Guidelines ranked well overall (67%) and relative to the WHO Global Report (61.3%)



PICNet – Regional Governance

Key recommendations:

Regional IPC monitoring dashboard.

Budget support

Education,

Research

Leadership

Technical Working Group Meeting - 5-6 June 2024

Pacific Community
Communauté du Pacifique

Pacific Infection Prevention and Control Network Meeting

Réunion du Réseau océanien de lutte contre les infections

Meeting Report

2024 Pacific Infection Prevention and Control Technical Working Group Meeting

Nadi, Fiji
5 – 6 June 2024

Report prepared by the Pacific Community, 2024

Pacific Community
Communauté du Pacifique

PICNet Strategic Plan 2025-2030

PICNet

The Pacific Infection Control Network (PICNet) is one of the six services of the Pacific Public Health Surveillance Network (PPHSN). Its role is to provide a platform for Infection Prevention and Control (IPC) officers and to support information sharing between Pacific IPC focal points as well as regional development partners.

Vision
A safer blue Pacific through the reduction of infections.

Mission
Support and enhance regional ownership and leadership for IPC in the blue Pacific

Goal
To reduce the burden and impact of infection and antimicrobial resistance in the Pacific

Values
Collegiality
Integrity
Respect
Equity

Linkages
- SDGs (3, 6)
- Pacific healthy Islands monitoring framework

Objectives

Education
Objective: Facilitate and enhance access to IPC education and training in the blue Pacific.

Workforce
Objective: Raise the profile of a qualified and competent IPC workforce.

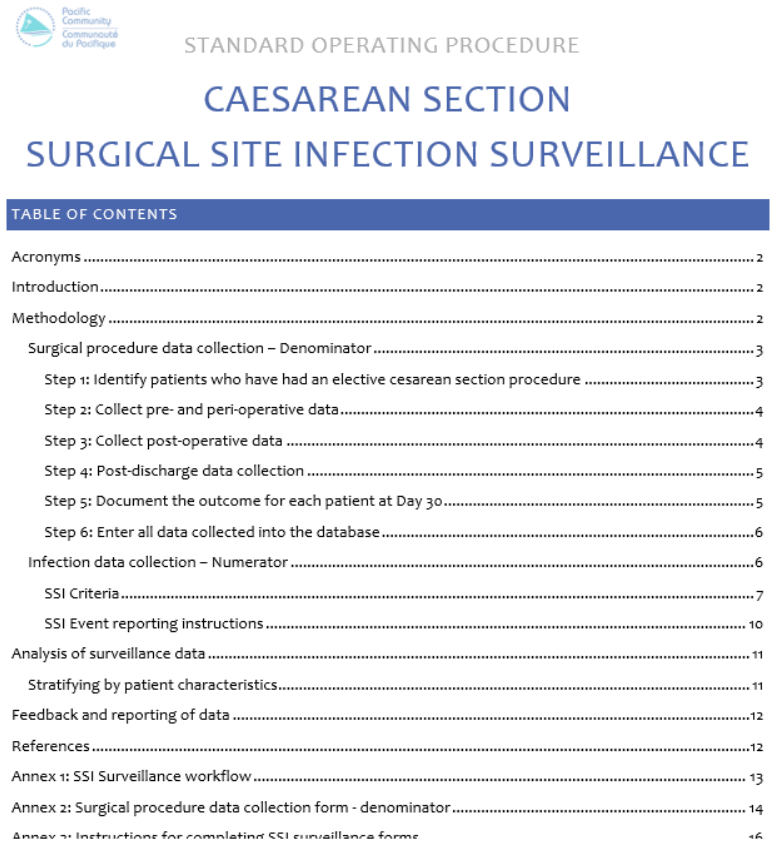
Advocacy
Objective: Advocate for governments, regional leaders, and donor partners to prioritise and support IPC as a means to reduce infection in the blue Pacific.

Data and Research
Objective: Strengthen regionally led data and research to inform decision making.

Monitoring and Evaluation
Use effective tools to measure, monitor and evaluate delivery of PICNet strategic plan.

Strengthening HAI Surveillance

- 60% of PICTs surveyed have HAI as a defined component of their national IPC program.
- Implementation of, surveillance for HAI in PICTs remains limited:
  - Less than half of the PICTs reported monitoring infections in vulnerable populations (40%) and healthcare workers (40%);
  - Half (53%) reported use of standardised data collection methods



STANDARD OPERATING PROCEDURE

CAESAREAN SECTION

SURGICAL SITE INFECTION SURVEILLANCE

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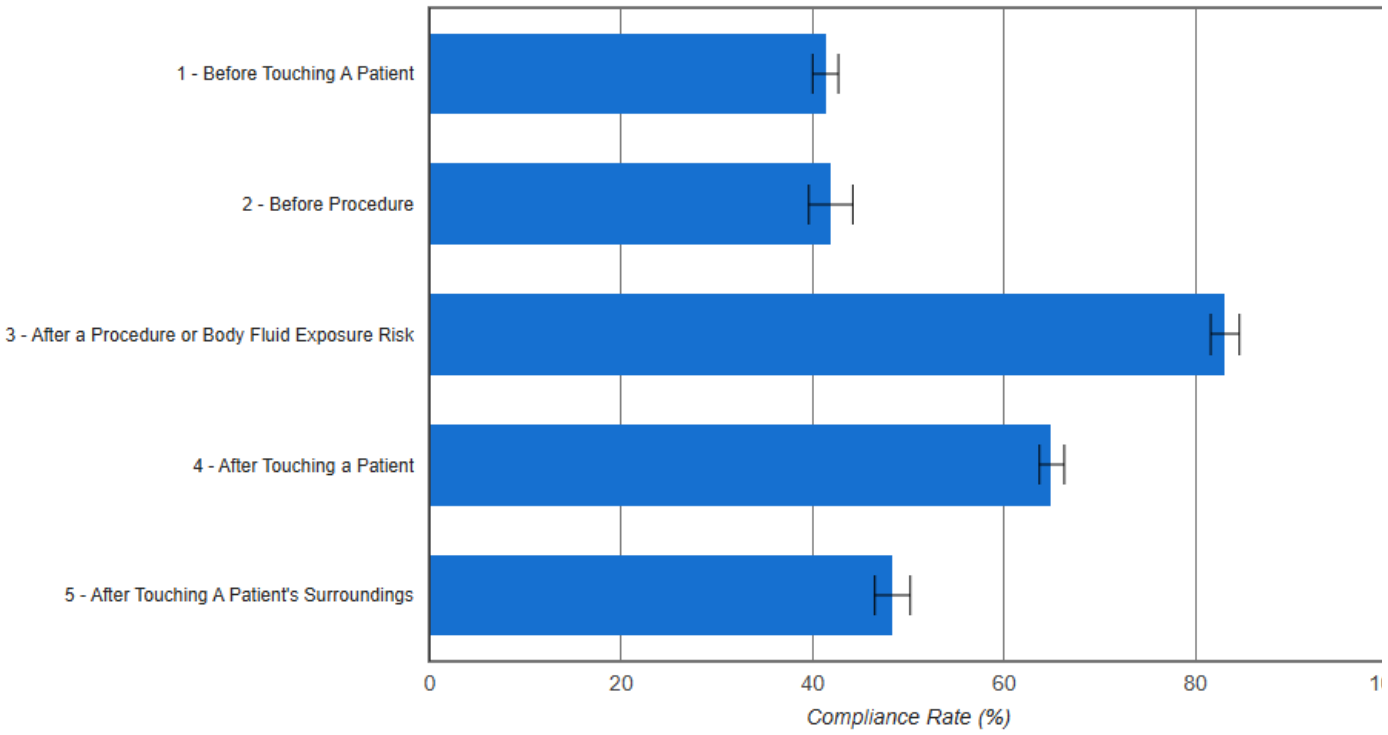
Focus on Hand-Hygiene

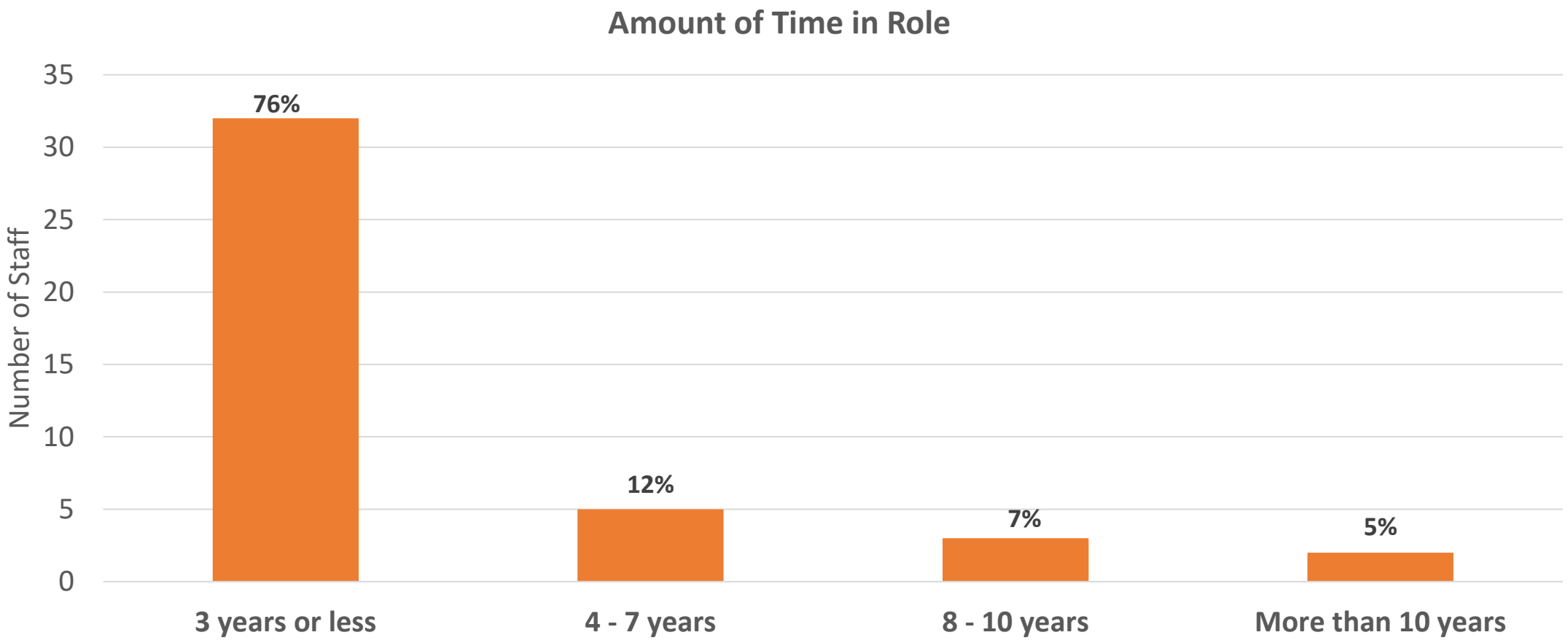


When gloves are taken OFF, the proportion of Moments that were MISSED is: 14.3%
When gloves are put ON, the proportion of Moments that were MISSED is: 65.8%
Of all Moments where glove use is recorded, Healthcare Workers FAILED to perform hand hygiene 44.8% of the time
When healthcare workers correctly performed hand hygiene, the proportion of Moments where alcohol based hand rub was used was 75.0%
When healthcare workers correctly performed hand hygiene, the proportion of Moments where soap and water was used was 25.0%

IPC Workforce – Staffing Ratios

IPC Officers per Beds	Approx No. Beds in Country*	No Staff	WHO Ratio	PPHSN Ratio
American Samoa	100	1	Yes	Yes
Cook Islands	100	0.5	Yes	No
Federated States of Micronesia - Pohnpei	150	1	Yes	No
Federated States of Micronesia - Kosrae	50	1	Yes	Yes
Federated States of Micronesia - Chuuk	100	1	Yes	Yes
Fiji	1450*	12.5	Yes	No
Kiribati	450	1	No	No
Marshall Islands	250	2	Yes	No
Nauru	100	1	Yes	Yes
Niue	150	0.5	Yes	No
Palau	100	1	Yes	Yes
Papua New Guinea	1900*	30	Yes	Yes
Samoa	650	5	Yes	No
Tokelau	150	0.5	Yes	No
Tonga	550	1	No	No
Tuvalu	50	0.5	Yes	Yes
Vanuatu	550	7.5	Yes	Yes

IPC Workforce - Experience



Promote Pacific Research and Publishing

Pacific Community
Communauté du Pacifique

One response: Global Outbreak Alert and Response Network supporting the COVID-19 response, Kiribati

Louise Laurie,[a,b] Margaret Leong,[c] Taata Titaake Kaufusi,[d] Helen Murdoch,[d] Wendy Snowdon,[e] Sharon Salmon[f,g,h] and Peta-Anne Zimmerman[a,i]

Correspondence to Peta-Anne Zimmerman (email: p.zimmerman@griffith.edu.au)

Problem: In January 2022, Kiribati experienced widespread community transmission of COVID-19, leading to high rates of infection among health-care workers (HCWs), which reduced essential HCWs during a period of increased hospital admissions.

Context: Kiribati, a Pacific island country made up of a remote group of 33 low-lying atolls in the Pacific Ocean, experienced its first surge of COVID-19 cases beginning on 24 January 2022.

Action: Reports of increasing numbers of COVID-19 cases in South Tarawa prompted the Kiribati Ministry of Health and Medical Services to request assistance from the international community, including the World Health Organization's Global Outbreak Alert and Response Network (GOARN), to support national COVID-19 response operations. Specialists in infection prevention and control (IPC) were deployed to Kiribati in February 2022 to assist the Ministry's National COVID-19 Taskforce in collaboration with national partners. These specialists helped review and strengthen IPC capacities to accommodate a potential patient surge and consequent demands for medical consumables in health-care facilities in South Tarawa.

Outcome: Strengthened knowledge about and processes for IPC among HCWs prevented health care-associated infections and reduced community disease transmission during the first surge of COVID-19 cases in Kiribati.

Discussion: GOARN has the capacity and ability to rapidly deploy experts to support requests for assistance. Outbreak response activities can be enhanced and sustained by using GOARN's resources and collaborating with all partners, as necessary.

PROBLEM

After almost 2 years of restrictions on international travel, introduced at the start of the COVID-19 pandemic, Kiribati recorded its first community-acquired cases of COVID-19 in January 2022. Within a few weeks, South Tarawa, the most populated island, had widespread community transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19, including among health-care workers (HCWs), propelling a nationwide lockdown and a declaration of a state of disaster by the Government of Kiribati.[1]

As hospital admissions escalated, the number of essential front-line HCWs was reduced owing to increased absenteeism due to illness, thus straining an already fragile health-care system. The Kiribati Ministry of Health and Medical Services (MHMS) initiated two requests for international assistance: the first to the Pacific

[a] Australasian College of Infection Prevention and Control, Hobart, Tasmania, Australia.
[b] University Hospital Geelong, Barwon Health, Geelong, Victoria, Australia.
[c] Suva Regional Office, Pacific Community, Suva, Fiji.
[d] Ministry of Health and Medical Services, Tarawa, Kiribati.
[e] World Health Organization Country Liaison Office for Kiribati, Tarawa, Kiribati.
[f] World Health Organization Regional Office for the Western Pacific, Manila, Philippines.
[g] Indo-Pacific Centre for Health Security, Department of Foreign Affairs and Trade, Canberra, Australia.
[h] UNSW Medicine, School of Public Health and Community Medicine, University of New South Wales, Sydney, Australia.
[i] Griffith University, Gold Coast, Southport, Queensland, Australia.
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Antimicrobial Resistance and Infection Control

RESEARCH Open Access

Baseline evaluation of the World Health Organization (WHO) infection prevention and control (IPC) core components in Pacific Island Countries and Territories (PICTs)

Margaret Leong[1*], Rochelle Picton[2], Melanie Wratten[1], Ana Mahe[3] and Peta-Anne Zimmerman[2]

Abstract

Background Comprehensive infection prevention and control (IPC) programmes are proven to reduce the spread of healthcare-associated infections (HAIs) and antimicrobial resistance (AMR). However, published assessments of IPC programmes against the World Health Organization (WHO) IPC Core Components in Pacific Island Countries and Territories (PICTs) at the national and acute healthcare facility level are currently unavailable.

Methods From January 2022 to April 2023, a multi-country, cross-sectional study was conducted in PICTs. The self-reporting survey was based on the WHO Infection Prevention Assessment Framework (IPCAF) that supports implementing the minimum requirements of the WHO eight core components of IPC programmes at both the national and facility level. The results were presented as a 'traffic light' (present, in progress, not present) matrix. Each PICT's overall status in achieving IPC core components was summarised using descriptive statistics.

Results Fifteen PICTs participated in this study. Ten (67%) PICTs had national IPC programmes, supported mainly by IPC focal points (87%, n = 13), updated national IPC guidelines (80%, n = 12), IPC monitoring and feedback mechanisms (80%, n = 12), and waste management plans (87%, n = 13). Significant gaps were identified in education and training (20%, n = 3). Despite being a defined component in 67% (n = 10) of national IPC programmes, HAI surveillance and monitoring was the lowest scoring core component (13%, n = 2). National and facility level IPC guidelines had been adapted and implemented in 67% (n = 10) PICTs; however, only 40% (n = 6) of PICTs had a dedicated IPC budget, 40% (n = 6) had multimodal strategies for IPC, and 33% (n = 5) had daily environmental cleaning records.

Conclusions Identifying IPC strengths, gaps, and challenges across PICTs will inform future IPC programme priorities and contribute to regional efforts in strengthening IPC capacity. This will promote global public health through the prevention of HAIs and AMR.

Keywords Infection prevention and control, Healthcare-associated infections, Antimicrobial resistance, WHO IPC core components, Low- and middle-income countries

Responding to COVID-19 on the outer islands of Tuvalu

Karen Hammad,[a,b,c] Lily Tangisia Faavae,[d] Aloima Taufilo,[e] Margaret Leong[f] and Viliame Nasila[g]

Correspondence to Karen Hammad (email: karenhammadconsulting@gmail.com)

Problem: Coronavirus disease (COVID-19) reached Tuvalu's shores in November 2022, making Tuvalu one of the last countries in the world to experience community transmission of the disease. With minimal capacity to deliver critical care and a small health workforce that had been further depleted by COVID-19 infection, response priorities rapidly shifted to the outer islands.

Context: The outer islands are accessible only by boat, with travel taking from 6 to 24 hours. The return of high school students to their home islands for the Christmas holidays had the potential to place further pressure on the islands' medical facilities.

Action: A multiorganizational collaboration between the Australian and Fijian governments, the Pacific Community, the Tuvalu Ministry of Social Welfare and Gender Affairs (MoHSWGA) and the World Health Organization facilitated the deployment of two teams to the outer islands to provide support.

Outcome: The team worked with public health and clinical staff to provide technical support for clinical management, infection prevention and control, laboratory, risk communication, community engagement and logistics.

Discussion: The outer islands' response to the pandemic significantly benefited the island communities, the MoHSWGA and the team members who deployed. The key lessons identified relate to the need to strengthen the health workforce and supply chain.

PROBLEM

In November 2022, Tuvalu became one of the last countries in the world to experience an outbreak of coronavirus disease (COVID-19) when community transmission was detected on the main island of Funafuti.[1] With a land mass of 26 km² consisting of Funafuti and eight outer islands (OIs), Tuvalu is one of the smallest and most remote countries in the world.[2] Approximately 40% of Tuvalu's population of 11 000 live on the OIs.[2] In March 2020, with the primary objective of a COVID-19-free country, the Government of Tuvalu declared a state of emergency and initiated strict border measures.[3] As a precautionary measure to protect against the transmission of the virus to the OIs, the Government mandated the relocation of people from Funafuti back to their home islands and prohibited people returning to Funafuti.[3,4] This led to a 35% increase in the OI population.[5]

Shortly after a COVID-19 outbreak was reported in Funafuti, the OI of Nui detected COVID-19 in a traveller returning from Funafuti. This coincided with the end of the school year and the imminent return of nearly 500 boarding school students to their home islands. The possibility that the return of students could induce community transmission of COVID-19 across all OIs caused concern as health resources were likely to be rapidly overwhelmed. Estimations at the time suggested that a high percentage of the OI population had risk factors for severe COVID-19 disease, such as people aged over 60 years and those diagnosed with one or more noncommunicable diseases, in addition to pregnancy or smoking.[6]

Of particular concern was the potential for those with risk factors to develop severe or critical COVID-19 disease and requiring higher levels of treatment not

[a] Menzies Health Institute Queensland, Griffith University, Gold Coast, Queensland, Australia.
[b] College of Nursing and Health Sciences, Flinders University, Adelaide, South Australia, Australia.
[c] Division of Pacific Support, World Health Organization, Suva, Fiji.
[d] Ministry of Social Welfare and Gender Affairs, Funafuti, Tuvalu.
[e] Fiji Emergency Medical Assistance Team, Ministry of Health and Medical Services, Suva, Fiji.
[f] Pacific Community, Suva, Fiji.
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FUTURE DIRECTIONS

- Political commitment & IPC Budget
- Support IPC capacity-building & recognition of IPC roles as senior positions
- Development of systems to monitor, report HAIs surveillance and monitoring of IPC indicators.
- Strengthen national hand hygiene programme and HAI surveillance and antimicrobial resistance.
- Support IPC research capacity building including data sharing

Acknowledgement and Thank you

Pacific Island Countries– IPC teams