

# Universal Coverage and Incentives to Work in Rural and Remote Areas of the Pacific.

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## Abstract

*We address issues related to the two most significant human resources factors that impact on universal health coverage in Pacific Island Countries: maintaining health staff in remote areas and the migration of health staff from the region. Providing universal health coverage in the Pacific requires the deployment of Primary Health Care staff to remote areas and also of clinical staff to district level facilities or lower. We reviewed the literature on the use of retention incentives and allowances, Pacific skilled health worker migration and the public service manuals of 8 Pacific countries, to identify the range of incentives and allowances available, in which housing and financial incentives feature most, and the areas where policy review could assist in attracting to and retaining health staff in rural and remote areas and in the countries of the region..(PHD 2012; Vol 18(2): p78-87)*

## Introduction

The demography of the Pacific is unique, with small populations dispersed across geographically large areas. Maintaining health services and the professional skills needed in remote locations, or small island states, depends on systems of staff production, recruitment and deployment on conditions of service that encourage their retention in the workforce, and, where conditions are difficult, provides further incentives. This paper reviews the range of incentives and allowances currently offered to health workers (HW) in public sector health services in Fiji, Samoa, Tonga, Vanuatu, Kiribati, Tokelau, Solomon Islands and the Marshall Islands, with a view to identifying the current range of retention policies applied in the region, and to open this issue for discussion on retention policy options to further incentivise rural and country level retention, and/or to facilitate intra-regional professional mobility.

## Background

Shortages of health staff in many developing countries is a global reality<sup>1</sup> and one of the biggest constraints to achieving universal health coverage.<sup>2</sup> Migration of health workers from Pacific Islands Countries (PIC) to the wealthier countries of the Pacific Rim and beyond is now well documented,<sup>3-5</sup> while the issues of maldistribution of health staff<sup>1</sup> and resultant inequalities of health outcomes<sup>6</sup> within countries has gained attention more recently. Along with the Pacific's limited production of new health workers, these issues are at the core of service provision that begins to approximate equitable access and provides universal health coverage.

Incentives are globally recognised to be effective in improving rural health worker retention.<sup>7</sup> The WHO recommendations in this areas fall under four broad themes:

- Educational (e.g. target rural student admission to HW programs, locate training schools outside major cities, expose students to rural experiences in curricula)
- Regulatory (e.g. enhance scope of practice in rural or remote areas, increase types of HW, ensure compulsory rural service requirements are accompanied by appropriate support)
- Financial (e.g. allowances, free or subsidised housing, transportation, paid vacations); and
- Personal and professional support (e.g. improve living conditions for HW and their families, provide safe working environments, career development programs and pathways, support professional networks, adopt public recognition measures).

Examples of the application of incentives come from across the developing world, from Africa<sup>8</sup> to Asia.<sup>9</sup> However, there are few 'success stories',<sup>10</sup> few studies have evaluated the effectiveness of incentives and allowances,<sup>11,12</sup> and little evidence emerges that they help retention.<sup>13</sup> The lack of evaluation studies is due to several complexities including: mixed terminologies, complex interventions, difficulty in assessing context, lack of baseline information and the need for multi-method and multi-disciplinary approaches for effective monitoring and evaluation.<sup>12</sup>

The Caribbean Community (CARICOM) provides an example for the Pacific to consider as it experiences the scale up of the medical workforce over the next 5-7 years. The Road Map for Strengthening the Caribbean Workforce 2012–2017<sup>14</sup> focuses on strengthening human resources as part of a strategic approach to address the health and developmental issues of the region. Intra-regional movement of HW in the Pacific is occurring but on an informal and individual level. The development of similar conditions of employment across the region could present a method of supporting universal coverage.

#### *Pacific Migration*

Doyle et al<sup>15</sup> attempted to gather information on HRH migration from Cook Islands, Fiji, Papua New Guinea (PNG), Samoa, Solomon Islands and Vanuatu, but found that none had adequate data collection procedures to characterise the phenomenon. In February 2011, the Pacific Human Resources for Health Alliance (PHRHA) met in Nadi, Fiji, where representatives from 13 PICs discussed issues and challenges in Human Resources for Health (HRH). Five challenges emerged from their presentations: health workforce issues (skills shortages, retention, recruitment and workforce ageing); the lack of effective HRH policy, management and information systems; education and training for HRH production; public sector working conditions, and the migration of health personnel, both internally and internationally. While these issues are perceived as important challenges, the systems required to gather relevant information to quantify or characterise them are not available.<sup>16</sup>

HW migration in the Pacific is a component of wider migration flows, where there has been consistent outflow of people for many decades.<sup>17</sup> Some countries have high rates of HW emigration (Fiji, Cook Islands, Samoa,

American Samoa, Niue and Tonga); others are heavily reliant on recruiting expatriate workers to fill shortages (Palau, Marshall Islands, Nauru, Northern Marianas Islands and the Federated States of Micronesia).<sup>4</sup> The Pacific has a 'culture of migration',<sup>18</sup> as many as one third of all HW in Tonga, Samoa and Fiji think about migrating as soon as they enter the profession.<sup>4</sup> For many Pacific Islanders, working overseas is viewed as an increase in community status, as their remittances support relatives at home.<sup>4</sup> As a result of this 'culture of migration' and the importance placed on remittances, policies to encourage retention in the country workforce are not evident.

Negin<sup>3</sup> demonstrated that the most readily accessible information on professional migration from PICs was available in recipient country census data, although with the limitation of not identifying whether they are actively employed in the health sector. Doyle and Roberts<sup>5</sup> found by analysis of data from the Database on Immigrants in OECD and non-OECD Countries (DIOC-E, Release 3) that around the year 2000 approximately 3282 professional health workers from Cook Islands, Fiji, PNG, Samoa, Solomon Islands and Vanuatu were working in an overseas country. Around two thirds were from Fiji, 22% from PNG and 10% from Samoa. Australia was the destination for more than half of the total, followed by New Zealand and the United States; and close to 75% of the total overseas Pacific health workforce was female.

#### *Pacific Rural and Remote Retention*

In comparison to urban areas, rural areas are underserved in most PICs (Table 1). In all eight countries reviewed the proportions of health workers in rural areas were well below the proportions of the population in rural areas, and health worker densities were also lower, in part reflecting concentrations of health workers in higher level services in urban areas, but also indicating vacant positions (Table 3).

**Table 1. Proportions of populations, health workers and health worker to population ratios (rural and urban areas) by country.**

Country	Year	% Population in Rural Areas	% HW in Rural Areas	HW Density (per 1,000 population)	
				Rural	Urban
Fiji	2011	46.6	16.3	1.3	5.8
Samoa	2011	80.1	18.1	2.0	36.3
Tonga*	2013	27.1	19.9	5.8	8.6
Vanuatu	2012	75.1	57.7	3.9	8.5
Kiribati	2010	48.3	No data available		
Tokelau†	2012	-	-	-	-
Solomon Islands	2012	81.4	46.0	1.8	8.2
Marshall Islands	2012	26.0	8.8	3.1	11.9

Source: Human Resources for Health Knowledge Hub<sup>19-26</sup>

\* Urban-rural boundaries in Tonga are unclear. It is assumed for this table that populations on the main island of Tongatapu are urban and other islands are rural.

† There are no urban-rural boundaries.

**Table 2. Doctor and nurse to population ratios in urban and rural areas by country.**

Country	Year	Ratio of 1 Doctor to Population		Ratio of 1 Nurse to Population	
		Urban	Rural	Urban	Rural
Fiji	2011	1599	9197	301	1030
Samoa	2011	354	37,371	102	763
Tonga*	2013	1534	4646	307	422
Vanuatu	2012	1492	47,250	350	867
Kiribati	No data available				
Tokelau†	2012	352		109	
Solomon Islands	2012	1472	24,336	213	881
Marshall Islands	2012	1639	0‡	236	0‡

Source: Human Resources for Health Knowledge Hub<sup>19-26</sup>

\*† See notes to Table 1.

‡ Only Health Assistants are posted to the rural outer islands.

**Table 3. Proportion of vacant doctor and nursing posts in rural areas.**

Country	Year	Doctors		Nurses	
		% Vacant Established Posts	% Vacant Posts in Rural Areas	% Vacant Established Posts	% Vacant Posts in Rural Areas
Fiji	2011	23.6	14.7	7.0	11.7
Samoa	2011	1.8	No data available	7.6	No data available
Tonga*	2013	8.3	80.0	0.0	0.0
Vanuatu	No data available				
Kiribati	No data available				
Tokelau†	2012	0	0.0	31.6	-
Solomon Islands	2012	18.1	36.8	8.7	16.2
Marshall Islands	2012	27.3	0.0	7.2	0.0

Source: Human Resources for Health Knowledge Hub<sup>19-26</sup>

\*† See notes to Table 1.

The doctor to population and nurse to population ratios (Table 2) show even greater differences between urban and rural areas, most marked in Samoa and Vanuatu.

## Findings

The current allowances in Pacific countries documented in Public Service Commission (PSC) manuals<sup>27-33</sup> include sections on general public service conditions of service, such as leave entitlements, shift allowances and other allowances available to all public servants. We did not locate any specific policy or reference to an incentive to counter the extent of HW emigration.

We have identified in Table 4 the incentives that are specifically available to HW in rural/remote areas, and have also identified other standard and negotiable allowances for all health staff.

Most incentives and allowances identified are either financial or housing. Whether housing is an incentive depends on individual circumstances. There are few educational incentives available, limited establishment of training schools outside of urban centres (e.g. some nursing schools in the Solomon Islands and one in Fiji), many countries bond their scholarship or subsidize students<sup>34,35</sup> and deploy them as required, and programs do expose students to rural environments during training (e.g. nurse students in Tonga, and several cadres trained in Fiji). In our workforce profiling of PICs<sup>19-26</sup> we have found that over-expenditure of allowances occurs consistently in a number of Pacific countries as a significant and persistent budgetary problem that results in operational funds being used to meet human resource overruns. The research question that arises now is to assess the costs of retention incentives relative to the costs of training staff who leave service rather than accept a rural posting.

Table 4. Incentives available to health workers to improve retention rates

Country	Rural Incentives	Standard and Negotiable Allowances
Fiji	<p><i>Rural Locations Allowances:</i> Single officer F\$1200/year; married officer F\$1800/year; for staff in posts &gt;45km from declared city or townships.</p> <p><i>Nurses Consolidated Allowance:</i> +15.5% of basic fortnightly salary for nurses in districts.</p> <p><i>Housing:</i> Doctors in rural areas are provided with housing and on-call allowance.</p>	<p><i>Medical Officer Transfer Allowance:</i> For transfers &gt;3 months. Single officer F\$190; married officer F\$395.</p> <p><i>Medical Officer Consolidated Allowance:</i> +15.5% of annual basic salary for extra hours worked that cannot be recorded accurately.</p> <p><i>Environmental Allowance:</i> +15.5% of basic fortnightly salary for Principal Medical Officer-level and below including dentists in hospitals and nurse practitioners in health centres without medical officers.</p> <p><i>Housing:</i> HW eligible for subsidised housing (8% of basic salary); expatriate doctors; divisional hospital medical superintendents; matrons, supervisors at specialist hospitals; doctors, nurses at sub-divisional hospitals, rural health centres and nursing stations. Essential services and rural postings are prioritised.</p>
Tonga	<p><i>Relocation Allowance:</i> For HW posted to Nius.</p> <p><i>Nurse rotation:</i> Nurses rotated often between hospital and rural areas to prevent burn out.</p>	<p><i>Government Housing:</i> Staff entitled to government housing decided by the housing committee</p> <p><i>Career Path:</i> Doctors encouraged to finish postgraduate training to enable them to be promoted to Senior <i>Medical Officer level</i>. After 4-5 years in this post, they are again promoted to Specialist-level posts.</p>
Vanuatu	<p><i>Remote Allowance:</i> Vt10,000/month for postings in remote areas (not serviced by regular shipping, far from air strips and other communication).</p> <p><i>Government Housing:</i> For HW outside Port Vila or Luganville. If no house is available, an allowance of Vt50,000/month is provided.</p>	<p><i>Permanent Posting Allowance:</i> Vt50,000 Permanent Posting Allowance and Vt30,000 Establishment Allowance (lump sum) for those who require a change of residence when posted into a new position.</p>
Solomon Islands	<p><i>Housing:</i> Kit homes built in 2010 but not enough.</p> <p><i>Provincial Allowance:</i> Doctors given +20% on top of mean salary if in a provincial position.</p>	<p><i>Special Duties Allowance:</i> +33% on mean salary for doctors performing duties outside of salary grade.</p> <p><i>Multi-shift Allowance:</i> +25% on mean salary for doctors working multiple shifts.</p> <p><i>Transport Allowance:</i> SD\$6500/year for doctors and &lt;SD\$50,000 loan guarantee for vehicle duty and GST.</p> <p><i>Domestic allowance:</i> +25% on mean fortnightly salary for doctors.</p> <p><i>Danger Duty:</i> SD\$9100/year (SD\$350/fortnight) for doctors working in a dangerous area</p>
Samoa	<p><i>Remote Locality Allowance:</i> \$600-1000 p.a. depending on location (availability of transport, means of communication and social amenities).</p> <p><i>Housing:</i> Given to HW in district hospitals.</p>	<p><i>Local Travelling Allowance:</i> For travel within Samoa when absent from normal place of residence overnight; Chief Executive Officers WST\$30/night; other public servants WST\$25/night.</p> <p><i>Shift Allowance:</i> Compensation for working unsocial hours at WST\$3.15/hour.</p>
Tokelau	No rural retention incentives are available.	<p><i>Travel Allowance:</i> Officers requiring travel inter-atoll or overseas receive per diems.</p> <p><i>Housing:</i> Medical staff receive free housing.</p>
Marshall Islands	No rural retention incentives are available.	<p><i>Special Allowances:</i> To recognize or recompense for such specific conditions or circumstances arising from the nature or location of employment.</p> <p><i>Transfers:</i> Travel, moving costs and housing allowances for the employee may be provided for either a transfer of posts, or their first posting to a location not his/her residence.</p> <p><i>Residential Headquarters:</i> H may be provided with housing and furniture. Rent may be deducted from salaries.</p>
Kiribati	<i>Rural Incentive Allowance:</i> HW posted outside South Tarawa are entitled to a Rural Area incentive allowance at AU\$20/fortnight. Employees who are recruited from the outer islands are not entitled.	<p><i>Travel on Initial Appointment, Transfer or Promotion to Another Island:</i> Employees and dependants are entitled to transport when appointed permanently to another island, requiring change in residence.</p> <p><i>Disturbance Allowance:</i> AU\$31.25 for a married employee, or a single employee with dependent children, AU\$25 for a single employee; when transferred for a period of &gt;2 months.</p> <p><i>Housing:</i> All HW are eligible for housing but receiving it is dependent on Housing Committee.</p>

Source: Compiled from PSC manuals of Fiji, Samoa, Tonga, Vanuatu, Kiribati, Solomon Islands, <sup>27,3</sup> and Human Resources for Health Knowledge Hub<sup>24</sup>

## Discussion

It can reasonably be inferred that current retention incentives are not working well, as vacancies in rural areas remain and emigration from the region is continuing. The use of financial and housing incentives could be supplemented by incentives in the educational, regulatory and supportive of personal and professional goals domains. For example, progression to further training could be related to a period of service in a rural or remote location, the opportunity for experience in extended clinical practice, or a managerial role, could support career progression.

This review of the incentives and allowances currently offered across the countries of the region shows significant variation in how retention incentives are structured, although general allowances for sick and annual leave are similar. Rural retention incentives and allowances appear to be established to support the retention of doctors and nurses, but, while housing and salary supplements to doctors are available they are not specifically provided to counter migration, or marketed in a way to attract health professionals from other PICs. That they differ could suggest that policy has been developed for differing contexts, although other explanations may be proffered: that governments and financially conservative public sector employers have not identified the opportunity costs of vacancies (including international recruitment); and, that current incentives and allowances have not been adjusted in response to the emerging global trend in professional labour force dynamics. These dynamics include the informal intra-regional movement and employment of Pacific health professionals. Given this emerging trend there appears to be some potential to fill skills gaps by the provision of incentives and allowances adequate to attract Pacific HW to work in remote areas.

Discussion of such issues among the region's public sector employers, and the development of common approaches could contribute to universal health coverage in the region, and to the development of a Pacific health workforce. That said; there is a clear need for research into the effectiveness of retention incentives and allowances to counter urban pull and the emigration of HW from the region.

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