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Country Profiles

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Introduction

This Supplement accompanies the The Pacific Rehabilitation Health Workforce WHO Discussion Paper Series, Paper No. 1 October 2012. That paper reports on a project to develop a Pacific Rehabilitation Workforce Working Paper undertaken by Professor Gwynnyth Llewellyn, Alex Gargett and Professor Stephanie Short from the Faculty of Health Sciences, University of Sydney on behalf of Western Pacific Regional Office, WHO in consultation with Pauline Kleinitz, and Dr Gulin Gedik, WPRO and informed by a Steering Committee.

This Supplement provides the detailed information gathered in the course of the project on the 14 Pacific Island countries. This data was gathered through desk review of current rehabilitation workforce literature and relevant Pacific-focused literature and reports, collection of data regarding rehabilitation services and workforce through AusAID mapping and national templates – Pacific Rehabilitation Health Workforce (PRHW) - completed by Pacific CBR Forum participants, and interviews and focus groups with Pacific CBR Forum participants and key informants. A detailed description of the project approach is included in The Pacific Rehabilitation Health Workforce WHO Discussion Paper Series Paper No. 1 Appendix A.

The 14 country profiles are organised as follows: Name of country, country information, health, disability, workforce data summary, links with health system, issues identified by health workforce, rehabilitation workforce needs, and perspective of people with a disability. Each country profile is accompanied by a table documenting the rehabilitation health workforce according to occupational category.

1. Country Profile: Cook Islands

1.1 Country Information¹

The Cook Islands is made up of 15 major islands and is a self governing state in free association with New Zealand. The population of Cook Islands was estimated to be 15,576² people in 2011 with most of the population based on the island of Rarotonga. Tourism is the main industry and between 2010 and 2011 they hosted nearly 3 times their population in visitors to the islands.

The country is in a free association agreement with New Zealand and has a democratic parliament with 24 elected members.

Demographic Indicators:³

- Land area: 237km²
- Population density (2010): 66/km²
- GDP (2008): USD 10,875
- Life expectancy: Males: 68.0 Females: 74.3
- Infant mortality rate: 15.3/1000 live births

1.2 Health⁴

There is a well established health system on the main island Rarotonga however very limited access to services on the outer islands. At Rarotonga Hospital there is range of services including a tele-health facility which provides distance education for health staff and consultation with specialists for complex cases. In addition to the general hospital there are 6 primary health care centres and in 2009 there were 24 physicians, 116 nursing and midwifery personnel and 9

¹ Unless otherwise indicated all health information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

² Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

³ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁴ Unless otherwise indicated all health information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

community health workers throughout the facilities. Almost half (10) of the physicians were 'non-nationals'.⁵

The major health problems in Cook Islands are related to non-communicable diseases with a reported diabetes rates at 11.8% for males and 3.8% for females and obesity prevalence at almost half (48.4%) of the male population and one third (36.2%) of the female population. Hospital records indicate that 63% of patients admitted were hypertensive. These high records of risk factors are reflected in the morbidity and mortality data with non-communicable diseases as the leading causes of both.

1.3 Disability⁶

The Cook Islands has signed and ratified both the Convention on the Rights of Persons with Disability and the Optional Protocol. The Disability Section in the Ministry of Internal Affairs and Social Services is the government focal point for disability and the Cook Islands Disability Council, which was established in 2001) is the coordination mechanism for addressing disability issues. There is a national plan of action *Cook Islands National Policy on Disability and National Action Plan 2008-2012* and there are several key strategic targets in the Cook Islands Business Plan that specifically relate to meeting the needs of people with disability.

1.4 Workforce Data Summary

The PRHW Template was completed by one of the service provider key informants who participated in the CBR Forum and represented the NGO providing community rehabilitation services in the Cook Islands. The information in the template is based on the key informant's working knowledge and experience of the rehabilitation services in the Cook Islands. The completed template was provided to the government key informant for comment during and after the interview in Nadi. The information presented here combines the template and interview data from the Cook Islands contingent at the CBR Forum which consisted of two service providers and one government key informant.

There is one physiotherapist based at the general hospital in Rarotonga who sees inpatients and provides some follow up in the community as time allows. The Ministry of Health also has one psychiatrist, who is based at the hospital and conducts visits to the outer islands, and funds visits from international specialists twice a year. The two service providers explained that the clinics that are run by these visiting professionals fill up very quickly and they fail to meet the

⁵ Human Resources for Health Knowledge Hub, University of New South Wales. (2009) *Mapping human resources for health: Profiles from 15 Pacific Island Countries*. (p15). Accessed at <http://www.hrhub.unsw.edu.au/HRHweb.nsf/page/Publications>

⁶ Unless otherwise indicated all disability information sourced from United Nations Economic and Social Commission for Asia and the Pacific (2010). *Disability at a glance 2010: a profile of 36 countries and areas in Asia and the Pacific*. Accessed at: <http://www.unescap.org/publications/detail.asp?id=1407>

actual demand and need for their services. The Ministry of Health has established guidelines for staff working within their services which the staff are required to follow.

At the community level in Rarotonga community there is one NGO – Te Vaerua Community Based Rehabilitation – which provides rehabilitation services to people with a disability. The program is coordinated by an expatriate rehabilitation volunteer with experience and training in the United Kingdom and New Zealand. The program funds one physiotherapist and one occupational therapist – both international expatriates. These positions are only filled when funding is available. Currently the physiotherapist is part funded by the Ministry of Health to provide services at the hospital two days a week. There is also one self employed local OT in the community who sees private patients. In Rarotonga there is a centre – The Creative Centre - for people with intellectual disability which is primarily an education centre. This has an increasing number of people who have had a stroke and elderly people attending as there is no alternative day care service. The NGO funded physiotherapist provides services at this centre several hours a week. There is also an NGO – Te Kainga – which provides a day program twice a week, including some vocational type rehabilitation, for people with mental illness. The three NGO rehabilitation personnel work closely together and hold regular team meetings and often conduct joint home visits. There are also efforts made to communicate with the MOH professionals and the self employed OT however this is not as well organised.

On the outer islands there are five disability centres which are located near the primary health care centres with two community disability assistants at each. The staff at these centres are funded by the Payments on Behalf of the Crown (POBOC) scheme and funds need to be applied for each year. The disability centre staff have good communication with the medical staff based at the health centres and when possible the NGO physiotherapist attends and assists to establish individual rehabilitation plans with the staff.

Community health nurses provide some rehabilitative services when following up after hospital discharge. This mainly includes post operative or discharge advice, care and support.

There are no speech pathology, podiatry, prosthetic & orthotic services available. The services above are provided by expatriates on short term contracts. All of these services are very reliant on volunteers and church groups, friends and family to provide support to people with a disability in the Cook Islands.

1.5 Links with Health System

On Rarotonga, the health professionals based at the hospital will make referrals to the rehabilitation services of Te Vaerua. However the service provider key informant's experience is that this does not happen consistently. Te Vaerua also conducts community awareness activities and is working to establish better working relationships with the staff at the national hospital. The Cook Islands National Disability Council is also starting the process of linking up all the Disability and Rehabilitation Services so that there is less overlapping of services and drain on resources and more information available to the public.

On the outer islands referral between the health and rehabilitation services is much more informal. Disability centres where they exist are located very close to the primary health care centres and referrals are made the “Island Way” where clients are simply invited to attend the centre as they leave the health clinic or when staff visit their village. According to the key informants where there people with a disability in the smaller communities on the outer islands this is known to the rest of the community so the need for formal referral processes is not as strong. Doctors and nurses will attend the disability centres to provide services in the centre as needed. Public Health Nurses also attend the centres and assist with teaching the clients personal hygiene skills.

The key informants also talked about herbal healers being available in the Cook Islands and widely used, including by people with a disability and for conditions that are seen in the rehabilitation services such as after suffering a stroke. These providers are not registered however and there is no hard data available for these services.

1.6 Issues identified by health workforce

The provision of rehabilitation health services in the community is a great need in the Cook Islands. Rehabilitation workers who provide services at the community level need a broader skills set to incorporate a range of services such as carer support (including emotional support), vocational training, life skills training and to do so with cultural awareness and sensitivity. One informant explained that this skill set is what is specifically sought after when recruiting personnel for the NGO, Te Vaerua. The lack of ongoing funding is also a big challenge to providing permanent/ongoing services to people and providing permanent positions and job security to the workers. There are challenges associated with extending services to the outer islands associated with the costs and logistics of travel. Currently the services on the outer islands are provided by workers who have no formal qualifications or training and have learnt their skills on the job, from visiting professionals.

1.7 Rehabilitation workforce needs

According to the service provider key informants Ministry of Health staff (for example, Community Health Nurses) usually see clients post discharge from hospital and this includes stroke victims and elderly people. The NGO rehabilitation team sees a broad range of clients that include people with intellectual disabilities who attend the day care centre and elderly people often after stroke, post surgery or age related co-morbidities that impact on independence and function.

Occupational therapy skills and speech pathology skills were nominated as the greatest need in the Cook Islands existing rehabilitation workforce’s skill mix.

1.8 Perspective of people with a disability

The Cook Islands representatives at the CBR Forum did not include a DPO representative. Efforts to contact the DPO were made however no response was received in the project time period.

Table 1. Rehabilitation Health Workforce – Cook Islands

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Specialist medical practitioners	2212	Psychiatrist	1	0.06	...	Government	Provides assessment, diagnosis and treatment. Based in Rarotonga and visits the outer islands.
Physiotherapists	2264	Physiotherapist	2	0.13	New Zealand	Government – Rarotonga Hospital (1) & NGO - Te Vaerua (1)	Government employed physiotherapist provides services in the hospital and in community if time allows. NGO physiotherapist provides community based therapy in the home.
Health professionals not elsewhere classified	2269	Occupational Therapist	2	0.13	New Zealand	Self employed (1) & NGO – Te Vaerua (1)	Home based assessments. NGO OT provides some assistive devices (limited resources)
Traditional and complementary medicine associate professionals	3230	Acupuncturist	1	0.06	New Zealand	Self employed	Acupuncture, massage.
Community health workers	3253	Public Health Nurse	13	0.83	New Zealand & Fiji	Government	Mainly nursing services but do include some rehabilitation such as teaching personal hygiene skills, and post operative care and advice.
Community-Based Rehabilitation Worker	Not included in ISCO	Rehabilitation Volunteer	1	0.06	United Kingdom and New Zealand	NGO – Te Vaerua (expatriate volunteer)	Rehabilitation, carer support, palliative care.
		Community disability worker	10	0.64	Trained on the job	Funded through 'Payments on Behalf of the Crown' scheme.	Life skills training, physical rehabilitation – based on individual plans.

* (as nominated by key informant in returned PRHW Template)

2. Country Profile: Federated States of Micronesia

2.1 Country Information⁷

There are 207 volcanic islands and atolls that make up the Federated States of Micronesia (FSM) which is a constitutional federation of four states (Chuuk, Kosrae, Pohnpei and Yap) in free association with the United States of America (USA). The population was estimated to be 102,360 in mid 2011⁸. Although Chuuk has the largest population (49%), the capital of the country is Palikir in Pohnpei which has 32% of the nation's population. Each state has an urban centre and approximately 23% of the entire population live in urban areas. The rural based nature of the population reflects the large contribution of subsistence farming and fishing to the economy. In 2001 the Compact of Free Association agreement with the USA expired. Under the new agreement the country has seen a significant reduction in financial assistance from the USA.

Demographic Indicators: ⁹

- Land area: 701 km²
- Population density (2010): 46/km²
- GDP (2007): USD 2,183
- Life expectancy: Males: 67.4 Females: 68.0
- Infant mortality rate: 37.5/1000 live births

2.2 Health¹⁰

The government in each state is responsible for maintaining and providing health services. There are four public hospitals (one in each state) and a network of 92 dispensaries, which function as primary health centres in rural areas and on the outer islands. For people who live on the outer islands the difficulties associated with travelling to the urban centre to access services at the hospital are often so great they prevent many people from doing so. In 2009 the health system in FSM had 63 physicians and 229 nurses providing services.

⁷ Unless otherwise indicated country information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

⁸ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

⁹ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

¹⁰ Unless otherwise indicated all health information is sourced from: World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

FSM continues to experience significant health threats from communicable diseases such as tuberculosis, leprosy or rheumatic heart disease as well as a steady increase in the incidence of non-communicable diseases with heart disease and stroke the leading causes of mortality in adults.

2.3 Disability

The Federated States of Micronesia has signed and ratified the Convention on the Rights of Persons with Disabilities in September 2011.¹¹

2.4 Workforce Data Summary

Despite several efforts the government representative who participated in the interviewees in this study was unable to source the data requested in the PRHW Template.

According to the Walji & Palmer (2012) report¹² the state hospital in the capital Pohnpei and a private hospital, Genesis Hospital, provide physiotherapy services. According to that report, the rehabilitation services provided at the state hospital are free and also include the provision of assistive devices however supply is limited. The services available at the private hospital are of higher quality and correspondingly more costly. Staff numbers or details of training are not provided in the report. The report notes there are no outreach rehabilitation services for people living on the outer islands.

The two key informants noted there are also mental health and substance abuse workers however their role appears to focus on disseminating awareness rather than a rehabilitative role for people living with mental illness.

2.6 Links with Health System

For many people in FSM, particularly on the outer islands, the first port of call for health services is often the traditional healer in their village. If they do present to a dispensary they would need to be referred to their state hospital to access specialised health services. Complex logistics and costs associated with travelling are a significant barrier to access the state urban based services.

2.7 Issues identified by health workforce

Concerns about the quality of the services for people with mental health were raised in the interview with key informants. In particular there are reports of overmedication and in some

¹¹ United Nations Office of the High Commissioner for Human Rights Regional Office for the Pacific. (2012). *Human rights in the Pacific: Country outlines 2012*. Suva.

¹² Walji, F. & Palmer, M. (2012) *Improving access to and provision of disability services and facilities for people with disabilities in the Pacific: Disability service mapping in the Pacific*. AusAID & CBM Australia-Nossal Institute Partnership for Disability Inclusive Development, Melbourne, Australia.

cases sterilisation of young women. This reflects a lack of understanding, knowledge and skills in the health professionals providing services to people with mental health issues in FSM.

2.8 Rehabilitation workforce needs

The two key informants, one from the DPO and the other, government, suggested that half of the cause of disability in FSM is congenital and the remaining is secondary to diabetes. The primary need identified by the government key informant is that the people who work in disability policy have knowledge and skills relevant to rehabilitation and disability so they can better identify and understand the priority issues and advise government on effective solutions.

2.9 Perspective of people with a disability

According to the DPO key informant the priority is to secure funding for communities to collectively advocate to government about their needs and provide solutions for addressing these.

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3. Country Profile: Fiji

3.1 Country Information¹³

The Fiji Islands consists of 332 islands with the majority of the population based on the two largest - Viti Levu and Vanua Levu. The capital, Suva, is based on Viti Levu and the country has a military led government since a coup d'état in December 2006. With an estimated population of 851,746 in mid 2011¹⁴ it is the region's largest country by population. Fiji also has one of the strongest economies in the region with sugar exports and tourism as major contributors. The political situation has had an impact on economic growth with an associated decrease in tourist numbers and a suspension of aid from the European Union until the country holds a democratic election. The population is predominantly an ethnic mix of indigenous Fijians and Indo – Fijian (approximately 40%).

Demographic Indicators: ¹⁵

- Land area: 18,273 km²
- Population density (2010): 46/km²
- GDP (2008): USD 3,499
- Life expectancy: Males: 63.8 Females: 67.7
- Infant mortality rate: 17/1000 live births

3.2 Health ¹⁶

The public health system in Fiji is managed by the Ministry of Health (MOH) through health facilities in four divisions which are each divided into subdivisions. There are 101 nursing stations, 77 health centres, 16 sub-divisional hospitals centres, three divisional hospitals and two specialist hospitals in Suva– Tamavua Hospital with TB, Leprosy and medical rehabilitation

¹³ Unless otherwise indicated all country information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

¹⁴ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

¹⁵ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

¹⁶ Unless otherwise indicated all health information is drawn from World Health Organization. (2011) *The Fiji Islands Health System Review*. Health Systems in Transition 1(1).

units and the St. Giles Mental Hospital. The health centres are managed by a medical officer or nurse practitioner and receive referrals from nursing stations and Village Health Workers (VHW – Fijian communities) or Community Health Workers (CHW – Indo-Fijian communities). These workers are community members who have been trained by the MOH and serve in this role on a volunteer basis. The ideal line of referral is for a patient to first seek help from a VHW/CHW or attend at a nursing station, health centre or subdivisional hospital. They are then referred higher to a divisional hospital if necessary.

The public health system is supplemented with a growing private health system which at the moment includes two private hospitals and 130 private general practitioners. These services are concentrated in the urban areas of the two main islands, Viti Levu and Vanua Levu.

There is also a large network of traditional healers who Fijians seek health services from, particularly in the rural areas.

Non-communicable diseases are the most significant challenge for health services in Fiji and are the leading cause of morbidity and mortality.

3.3 Disability

Fiji has signed and ratified the Convention on the Rights of Persons with a Disability in 2008. The Fiji National Council for Disabled Persons was established in 1994 as the focal point and national co-ordinating body for disability issues in Fiji.¹⁷ It sits within the Ministry of Women, Culture and Social Welfare. In 2008 the government released its national action plan on disability *National Policy on Persons Living with Disabilities 2008-2018* which sets out a framework for addressing disability in Fiji and promoting a more inclusive society by raising awareness and identifying the barriers to full participation in social and economic activities faced by people with disability. It states that the 1996 census included questions on people with a disability and identified 3117 people with disability in Fiji. However this was limited to people who were 'economically active and aged over 15 years'. The policy goes on to explain that the understanding of disability in the community and the identification approach adopted in the census was 'impairment' rather than 'activity' focussed and the true prevalence is likely higher than the UN's estimate at the time of 10% of the population, particularly when the rates of heart disease, diabetes, Vitamin A deficiency and road accidents are considered. According to the policy a national survey of people with disability was to commence in 2009.

3.4 Workforce Data Summary

Two completed PRHW Templates were returned by the two service provider key informants – one from the Fiji School of Medicine and the other from the co-ordinator of the Community

¹⁷ United Nations Economic and Social Commission for Asia and the Pacific (2010). *Disability at a glance 2010: a profile of 36 countries and areas in Asia and the Pacific*. Accessed at: <http://www.unescap.org/publications/detail.asp?id=1407>

Based Rehabilitation program within the Ministry of Health. The information in the template is based on the key informants' working knowledge and experience of the rehabilitation services in Fiji. A summary of the two Templates was distributed to all other key informants (7) who participated in the CBR Forum for comment. The information presented is a combination of information presented in the templates (and feedback on that information) as well as information gathered during the interview with 6 key informants at the Pacific CBR Forum and one follow up interview post the event. The key informants consisted of 5 service providers, 1 government official and one DPO member. The data is complemented by data available in health reports.

The key informants described a sound structure for the provision of health-related rehabilitation services. The *Tamavua Hospital* hosts the Pacific Island Countries' only specialist rehabilitation unit and the Rehabilitation Medicine Specialist is based there. According to the 2010 Ministry of Health Annual Report the unit also had 1 full time physiotherapist, an international volunteer physiotherapist, 1 prosthetist, two technical assistants, 1 counsellor and 1 social worker as well as nursing and other support staff with a total of 28 personnel. The services include inpatient and outpatient rehabilitation, prosthetic limb fabrication and fitting and some follow up in the community. The divisional and subdivisional hospitals also have specialist medical practitioners and physical therapists to provide inpatient and outpatient services.

The returned Templates suggested that the health system has orthopaedic surgeons, paediatricians, psychiatrists, cardiac surgeons, plastic surgeons and skin specialists available at the hospitals. Physiotherapists and prosthetic and orthotic technicians are also included in the hospital system's services however no hard data was available. The key informants suggested that almost all of the physiotherapists have graduated from the Bachelor of Physiotherapy program at Fiji National University (formerly Fiji School of Medicine). According to the 2011 publication *The Fiji Islands Health System Review*, at the beginning of 2010 there were 35 approved posts for physiotherapists within the Ministry of Health, and two vacancies. There was also one post for an Occupational Therapist however this was vacant. The key informants indicated that there are currently no local occupational therapists or speech therapists in Fiji. These professional services are currently provided by four international volunteers, 2 OT's and two SP's.

Fiji, along with the Solomon Islands, is one of the two countries to have a Community-Based Rehabilitation program integrated into its public health system. The model for this program, as described by the key informants, is to have Community Rehabilitation Assistants (CRA) based at the district level at health centres. Historically these roles were held by local community members with no formal qualifications. In 2006 the Cerebral Palsy Alliance (CPA) developed a training program to support the 14 workers in the roles at that time. In collaboration with the Ministry of Health, who recognised a need for the provision of community level rehabilitation services, and the Fiji School of Medicine (FSM), CPA transitioned the course to a Certificate in Community Disability and Rehabilitation at FSM at Fiji National University (FNU). This helped bring the role in alignment with the Ministry of Health's requirement that approved posts are filled by qualified personnel. The Ministry of Health funded 29 students in the first intake in 2010 to complete the one year certificate course with the understanding that they would be employed at posts based at health centres across the country. Since graduating, only 5 have secured

permanent posts and the remainder have reportedly been informed that they need to work as volunteers in the role for 18 months before being considered for a post. Currently there are around 10 workers doing this. The CPA also assisted to train 10 community disability workers in the Ba region who are functioning in this role as community volunteers.

There are also a number of NGO's and DPO's that provide rehabilitation services. Walji & Palmer (2012) state that the Spinal Injuries Association (SIA), the Red Cross and the United Blind Persons of Fiji (UBP) provide some assistive devices such as wheelchairs, crutches, canes, catheters, urine bags, white canes, and spectacles. These services were not discussed by the key informants. Staff at the St. Giles Mental Hospital provide specialist mental health services. This has traditionally been the only site or facility where these services are available. However according to the key informants there is an increasing focus on providing these services at the community level, although they are far from comprehensive.

3.5 Links with Health System

The key informants described the referral system for rehabilitation services in Fiji. The rehabilitation unit at Tamavua Hospital receives referrals from the divisional hospitals, who in turn receive referrals from the subdivisinal hospitals, and so on down to the VHW/CHW's. The Community Rehabilitation Assistants can also receive referrals from nursing staff and provide rehabilitation assistance to people in their communities. They can then refer to sub-divisional hospitals for physiotherapy and medical services as necessary and follow up on discharge recommendations from medical and physiotherapy staff at the hospitals.

In the case of young children with disability and early identification, maternal child health nurses assess all children regularly until age 5. They can then refer to the medical officer and paediatrician as needed. The DPO key informant explained that though health systems in Fiji are free, people must be able to afford to travel to facilities where they are offered such that many people have to travel large distances. Also people must be registered to access the health services. This requires people to travel to a centre to be registered. For many people with disability, particularly in rural communities, poverty and challenges associated with travel are prohibitive to their registration. In these communities many people use traditional medicine systems and healers. The DPO key informant felt this was heavily related to cost and distance from a service as well as a lack of awareness of what health services including rehabilitation can offer – 'they believe they have nowhere else to go'. The DPO – Fiji Disabled People's Federation - is conducting awareness raising activities in communities to promote health services and their benefits.

3.6 Issues identified by workforce and service providers

The key informants described a system that is reliant on good communication and referral between individual providers and facilities within the system. There have been some concerns amongst both CRA's and physiotherapists around a lack of role clarity which has impeded effective communication. There was a difference of opinion about whether doctors and nurses within the health system have a good understanding of disability and need for rehabilitation. For one informant, poor understanding meant that that people with disability experience difficulty

accessing appropriate treatment services and less likelihood of referral for rehabilitation. Another suggested that communication between the CRA's (where they exist) and the medical and nursing staff at the health centres is used well and effectively. A third communication difficulty was identified for physiotherapists who, trained to work in a hospital setting, may not be able to communicate effectively at the community level.

The presence of a health service model with rehabilitation workers at the community level integrated in to existing health facilities is a strength of the situation in Fiji identified by the key informants. The CRA's are also valued members of the communities they work in. Their role is well supported by the local community and other stakeholders such as DPO's.

However the service providers described some significant challenges to providing effective and quality services that are accessible to all in Fiji. These range from access to resources including photocopiers and transport to more complex factors associated with employment and professional development. For many rehabilitation workers it is difficult to secure a position after graduation. For example many physiotherapists volunteer their services at the national hospital after they graduate in the hope that someone will resign or a position will come available. Many of the graduating CRA's volunteering in their roles for 18 months in the hope of then being considered for employment. In addition there are is a lack of job security as many are employed on short term contracts.

Some informants also felt that disability and rehabilitation is not a strong focus within the MOH, which in turn means that the workers providing rehabilitation services are not valued or considered a priority.

3.7 Rehabilitation workforce needs

The main conditions in children who present with disability in Fiji are cerebral palsy, hearing impairment and intellectual disability (including a significant number with Down syndrome). The situation is somewhat different in the adult population where disability related to NCD's, in particular amputations, is a major issue.

There was a feeling amongst the key informants that there is a good model and structure in place to provide rehabilitation services and the most significant need is for the CRA graduates, who have the training and the skills to provide the services to be employed in positions at health centres throughout Fiji.

3.8 Perspective of people with a disability

Accessibility of services was the major issue identified by the DPO key informant who reported that people often need to walk long distances to reach the nearest health facility. As described earlier, the issues associated with registering mean that many people with disabilities have not registered. The key informant also described an opinion amongst people with disabilities that the health systems will not help them and there is no point in trying to access services. The DPO is attempting to address this issue through awareness raising activities about the health system and its benefits.

Table 2. Rehabilitation Health Workforce - Fiji

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Specialist medical practitioners	2212	Rehabilitation Specialist	1	0.001	Flinders University	Government (MOH)	Diagnosis, assessment, treatment, referral, home assessment.
Audiologists and speech pathologists	2266	Speech Therapist	1	0.001	Overseas	Government (MOH) – International volunteer (Japan)	...
Health professionals not elsewhere classified	2269	Occupational Therapist	1	0.001	Overseas	Government (MOH) – International volunteer (Japan)	Assess, diagnose, treat, educate.
Community health workers	3253	Community Rehabilitation Assistant	16	0.02	MOH/Save the Children, Fiji School of Medicine	Government (5 employed, 11 working as volunteers at community health centres)	Early Identification & Intervention, Health Promotion/Education, Rehabilitation, Referral to other services & Management. Design & construct equipment from local available materials and other organisation for donations of equipment and aids.
Community-Based Rehabilitation Worker	Not included in ISCO	Community disability worker	10	0.01	Have completed 5 modules of CRA course through Cerebral Palsy Alliance	Volunteer	Early Identification & Intervention, Health Promotion/Education, Rehabilitation, Referral to other services & Management. Design & construct equipment from local available materials and other organisation for donations of equipment and aids.

* (as nominated by key informants in returned PRHW Template)

4. Country Profile: Kiribati

4.1 Country Information¹⁸

Kiribati has a mid 2011 estimated population of 102,697¹⁹ people spread over 32 atolls and one volcanic island. This totals a land area of 811 square kilometres which is spread over 3.5 million square kilometres. The largest urban centre is South Tarawa and according to the 2010 census is home to approximately 50% of the population. Of primarily Micronesian ethnicity (98.8%), the country has made some economic gains in recent years but has ongoing issues with high unemployment rates.

Demographic Indicators:²⁰

- Land area: 811 km²
- Population density (2010): 124/km²
- GDP (2007): USD 1490
- Life expectancy: Males:58.9 Females: 63.1
- Infant mortality rate: 52/1000 live births

4.2 Health ²¹

Kiribati has a public health system administered by the central Ministry of Health and Medical Services. It consists of a national hospital in South Tarawara and three hospitals with more basic services in other parts of the islands. There is a strong network of primary care services through 92 health centres which are managed by registered nurses with additional training known as medical assistants.

¹⁸ Unless otherwise indicated health information is sourced from: World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

¹⁹ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

²⁰ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

²¹ Unless otherwise indicated health information is sourced from: World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

4.3 Disability²²

Kiribati has not yet signed or ratified the Convention on the Rights of Persons with Disabilities. The portfolio for disability issues sits in the Ministry of Internal and Social Affairs and according to UNESCAP's *Disability at a glance 2010* the government are in the process of drafting a national plan on disability. The DPO Te Toa Matoa hosted the National Disability Survey with technical support from Inclusion International Asia-Pacific²³ in 2004 with the report released in May 2005. The survey identified 3, 840 people with disabilities in Kiribati with physical disability (32%), vision impairment (27%) and hearing impairment (23.3%) with the highest prevalence. The report suggests the prevalence figures may reflect the more visible or better known disabilities in the community. The total figure represents about 3.5% of the population. This is significantly lower than the 15% suggested by WHO²⁴ .

4.4 Workforce Data Summary

The PRHW Template was completed by the service providers based at the rehabilitation unit at the national hospital in Kiribati. Only one person was able to attend the interview at the CBR Forum in Nadi. A summary of the information in the template and the discussion was provided to the 3 other Kiribati participants at the Forum for comment, with the data here representing the aggregate.

The rehabilitation services in Kiribati are provided from the rehabilitation centre based at the national hospital. The centre has two physiotherapists, graduates from the physiotherapy course at the Fiji School of Medicine and one physiotherapy technician who has been trained on the job by the two physiotherapists. The rehabilitation centre received support through Australian volunteers and the International Society for Prosthetics and Orthotics (ISPO) in the early to mid 2000's to establish a prosthetics centre at the hospital. There are two prosthetic technicians based at the centre who have trained in Brazil and Cambodia. The rehabilitation centre also provides some follow up support in the community however these services are limited, to those who live in/around Tarawa. There are currently no specialist skills in rehabilitation available for those who live in rural areas and on outer islands and no trained CBR workers to provide services in these outer communities. There are also no speech pathologists or occupational therapists in the country.

There are also many herbal medicine practitioners within the community who are trained locally on in traditional knowledge and who provide local massage and herbal medicine.

²³ Kiribati National Disability Survey Advisory Committee, Inclusion International, Asia Pacific Region & NZAID Regional Health Program. (2005). *Kiribati National Disability Survey Report*.

²⁴ World Health Organization. (2011). *World report on disability*. Accessed at http://www.who.int/disabilities/world_report/2011/en/index.html

4.5 Links with Health System

In Kiribati the first port of call when seeking health a service is usually the traditional healer before presenting to the hospital or a health centre. This can mean that by the time they present to the hospital the person may have developed complications which can limit the options for effective treatment for example with foot infections as a complication of diabetes resulting in amputation.

The rehabilitation centre receives referrals from medical staff at the hospital. Community based nurses or medical officers provide primary care services from Health Centres in rural areas and on the outer islands. They assess clients and refer to the main hospital if more specialist services are required, for example if someone has a stroke or a child presents with development delay. The system relies on how well local staff providing primary care can identify people with a disability and rehabilitation needs.

4.6 Issues identified by health workforce

Kiribati is one of the few countries in the region that has trained personnel in prosthetic and orthotic services. This is a real strength of the health rehabilitation services in Kiribati however the key informant also described challenges in service delivery. There are currently 5 people providing specialist rehabilitation services (two physiotherapists, one physiotherapy technician and 2 prosthetic technicians) and they operate within an institutional based model from the national hospital. Although the services do include some follow up in the community the size of this workforce and the costs of travel prohibit extensive services to rural communities and the outer islands. The service provider interviewed also identified the limited skill mix available in the current workforce as a significant issue affecting the quality of services. Most of the assistive devices in Kiribati are donated from overseas and therefore not locally available. This lack of locally available and cost effective devices also impacts on their ability to provide services.

4.7 Rehabilitation workforce needs

The majority of clients seen at the National Rehabilitation Centre are referred after stroke or amputation. Occupational therapy, podiatry and speech therapy are professional skills which are lacking in and needed in Kiribati. Podiatry skills are particularly needed for providing wound care and prescribing appropriate footwear to assist prevent and/or delay amputations related to diabetes. Speech and occupational therapy skills are need for rehabilitation after stroke.

4.8 Perspective of people with a disability

Due to other commitments the Kiribati DPO representative was unable to attend the interview during the Forum in Nadi. All Kiribati representatives participated in the half day workshop on the final day of the Forum and contributed to the discussion and information collected during this session.

Table 3. Rehabilitation Health Workforce – Kiribati

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Physiotherapists	2264	Physiotherapist	2	0.02	Fiji School of Medicine at Fiji National University	Ministry of Health. Based at the Rehabilitation Centre at the National Hospital	Physiotherapy assessment. Exercise prescription. Advice and training for use of assistive mobility devices such as wheelchairs, crutches. Have not had specialist training in orthopaedic or paediatric physiotherapy skills.
Medical and dental prosthetic technicians	3214	Orthotic/prosthetic technician	2	0.02	Brazil and Cambodia	Ministry of Health. Based at the Rehabilitation Centre at the National Hospital	Fabricate and fit prosthetic devices.
Physiotherapy technicians and assistants	3255	Physiotherapy technician	1	0.01	Trained by local physiotherapists	Ministry of Health	Assists physiotherapists provide rehabilitative services.

* (as nominated by key informants in returned PRHW Template)

5. Country Profile: Nauru

5.1 Country Information²⁵

Nauru is a single island nation with a total of 21 square kilometres in the South Pacific Ocean and the population was estimated to be 10,185²⁶ in mid 2011. Nauru is the smallest republic in the world and has a democratically elected 18 member parliament. There are 14 administrative districts, each with a committee. Nauru has no official capital but with the government buildings in Yaren this is accepted as the main district.

Large reserves of phosphate used to provide healthy revenue for Nauru but exhaustion of these has contributed to Nauru's current heavy reliance on foreign aid. Rehabilitating mined land is a priority however agricultural capacity of Nauru is limited and most of the food (including water) is imported from Australia. Nauru is very isolated; with the nearest land 300km away and with no safe harbour is only accessible via air travel.

Demographic Indicators:²⁷

- Land area: 21 km²
- Population density (2010): 475/km²
- GDP (2006-7): USD 2,071
- Life expectancy: Males: 55.2 Females: 57.1
- Infant mortality rate: 45.8/1000 live births

5.2 Health²⁸

Health services in Nauru are co-ordinated from the Republic of Nauru Hospital and in 2011 there were nine doctors based at the hospital. There is a shortage of locally trained staff and currently 50% of the staff working in the health services is expatriate.

²⁵ Unless otherwise indicated all country information is sourced from: World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

²⁶ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

²⁷ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

²⁸ Unless otherwise indicated all country information is sourced from: World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

Non-communicable diseases are the most significant contributor to poor health with high prevalence rates of diabetes, obesity and hypertension reported.

5.3 Disability

Nauru is not a signatory to the Convention on the Rights of Persons with Disabilities.²⁹ According to the DPO key informant it is difficult to know how many people in Nauru have a disability. The national census was completed in 2011 yet despite the efforts of the Nauru Disabled Peoples Organisation (NDPO) it did not include questions about disability. NDPO has 200 registered members. Given the population of Nauru this is not consistent with the findings of prevalence of the World Report on Disability and is likely a significant under estimation. The government has introduced several measures towards meeting the needs of people with disabilities in Nauru including an increase in the living allowance for people with disability (from \$75 AUD to \$100 AUD a week, and an increase in funding to support modifications such as the construction of ramps, fitting handrails etc to houses of people with disabilities. Eligibility for these benefits is determined by a national Disability Assessment Committee.

5.4 Workforce Data Summary

The PRHW template was completed and returned by service providers at the rehabilitation unit at the national hospital. The interview at the Pacific CBR Forum was attended by two key informants: the service provider and DPO member participating in the Forum. The information presented in this profile is a collation of data gathered in the returned Template including from a government informant and during the interview at the Pacific CBR Forum.

The returned template nominated only two workers in Nauru who are traditionally thought of as rehabilitation professionals – one physiotherapist and one physiotherapy aide. There is a paediatrician and a mental health doctor based at the hospital available to provide services to people with disability. The District Health Care Workers conduct basic assessments and act as a link between the patient in the community and the health service providers. There is also 1 HIV Counsellor and 2 HIV Counsellor Aides and a TB & Leprosy Coordinator who provide counselling and support to members of the community living with these conditions. There are no speech pathologists, occupational therapists, prosthetic and orthotic personnel or trained CBR workers in Nauru.

5.5 Links to Health System

Rehabilitation services are provided at the Republic of Nauru Hospital with some home visits as time permits. In late 2009 - 2011, the physiotherapist and the physician made community visits as a team every Thursday to follow up of disabled or elderly patients who had been in hospital

²⁹ United Nations Office of the High Commissioner for Human Rights Regional Office for the Pacific. (2012). *Human rights in the Pacific: Country outlines 2012*. Suva.

or came to hospital as outpatient clinics. The PT key informant would like to be able to expand this service.

Doctors, family members, and District Health Care Workers usually refer disabled persons for example after a stroke, or if diagnosed with a disability to the Disability Assessment Committee. The committee has Disability Assessment Criteria which have recently been reviewed and broadened to include more than just people with physical disability. For instance, to include mental disability, visual, hearing impaired, chronic ailments, and terminal cases. This has been welcomed within the disability community, though the DPO key informant expressed there is still concern around the transparency of the assessment process. Despite the broadening of the assessment criteria very few people with intellectual disability and mental illness are accessing the services.

Children who are assessed by the DAC are usually brought by their family members or via the Able Disabled School Teachers. This multidisciplinary approach to assessment and providing rehabilitation services is a strength of the existing services in Nauru.

5.6 Issues identified by health workforce

The hospital health service has short term placements of medical staff from Cuba and Taiwan. This makes it difficult to establish professional working relationships between rehabilitation workers and the medical staff. This also presents challenges to developing long term professional relationships given the language and cultural barriers. This turnover of staff also means that patients who require ongoing treatment for a chronic condition or disability are repeatedly meeting new health service professionals, re-telling their history, and having to try to develop a rapport with their doctor. The key informants identified a real need for health professionals to have the opportunity to gain specialist skills after graduation which are relevant to the particular health and disability conditions they are likely to confront in Nauru.

5.7 Rehabilitation workforce needs

Key informants reported that in the past 4 years the DAC has primarily seen people with physical disabilities. They hope to conduct a survey later this year to obtain more accurate figures and examine whether the changed criteria have opened up access. The PT key informant identified a need for occupational therapy, speech pathology and mental health expertise to be available at the national hospital as well as another physiotherapist to enable the implementation of Community Based-Rehabilitation.

5.8 Perspective of people with a disability

The DPO key informant identified a need for more specially trained professionals within the health service to provide rehabilitation. There is also a need for public awareness and for health professionals to understand of all the issues that face people with disability not only health issues. In recent consultations with parents of children with disabilities, the DPO identified a need for skills in assessment, diagnosis and providing appropriate early intervention for young children.

Despite a policy for inclusive education most Nauruans with a disability attend the special school and there were reports of unsuccessful attempts to integrate children into mainstream school. Many stay on at the Special School until their twenties because there is nowhere else for them to go, only to stay home with their family, and the Special School remains a familiar and secure place to be.

Unemployment is also a large issue for people with disabilities in Nauru and of the 200 registered members only 3 have full time jobs and very few have part time jobs.

Table 4. Rehabilitation Health Workforce - Nauru

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Physiotherapists	2264	Physiotherapist	1	0.10	Fiji School of Medicine	Government	Diagnosis, Assessment, Treatment and referral to appropriate specialist. Based at the national hospital.
Community health workers	3253	District Health Care Worker	14	1.4	In-service training and training 'on the job' through Health Education Programme of the Ministry of Health	Government	Basic assessment, monitoring and evaluation. Liaison and linkage between patient in community and health services.
Physiotherapy technicians and assistants	3255	Physiotherapy Aide	1	0.10	On the job training	Government	Treatment with supervision from physiotherapist.

* (as nominated by key informants in returned PRHW Template)

6. Country Profile: Niue

6.1 Country Information³⁰

Niue is a self governing nation in free association with New Zealand. As Niueans hold New Zealand citizenship there has been a steady rate of emigration of Niueans to New Zealand since 1966. The population of Niue was estimated to be 1,446 in mid 2011³¹ and the 2001 New Zealand census recorded 20 148 Niueans living in New Zealand. The country has very few natural resources and is extremely isolated with many essential supplies shipped in monthly from New Zealand.

Demographic Indicators: ³²

- Land area: 259 km²
- Population density (2010): 6/km²
- GDP (2006): USD 9,618
- Life expectancy: Males: 67.0 Females: 76.0
- Infant mortality rate: 7.8/1000 live births

6.2 Health³³

The health services in Niue are concentrated in the national hospital Niue Fook Hospital and are managed by the Department of Health. There are 4 doctors and 13 nurses with community outreach through Public Health nurse visits in to the community. The health priorities for Niue focus on addressing the increasing prevalence of risk factors for NCD's.

6.3 Disability

³⁰ Unless otherwise indicated all country information is sourced from: World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

³¹ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

³² Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

³³ Unless otherwise indicated all health information is sourced from: World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

Niue has not signed or ratified the Convention on the Rights of Persons with a Disability. The Department of Community Affairs is responsible for disability affairs and provide some support to people with disabilities including welfare payments. According to the government key informant there are no formal disability statistics collected in Niue but the Department of Community Affairs have developed their own database of people with a disability who are receiving their services. There are currently 23 people on that list which represents 1.8% of the population.

6.4 Workforce Data Summary

The PRHW Template was returned by the government key informant who completed this in consultation with the director of the department and the health department. The government and DPO key informants both attended the interview at the Pacific CBR Forum and the information here is drawn from the returned Template and discussion during the interview. There was no service provider from Niue participating in the Forum.

Apart from the one physiotherapist at the national hospital there are no personnel with specialist skills or training in rehabilitation in the health system. There are four doctors at the hospital who receive advice and support from specialist medical practitioners in New Zealand via teleconference, telephone and email. Specialists based in New Zealand also conduct consultations using these 'tele-health' tools.

There are no rehabilitation services at the community level and the care of people with disabilities is the responsibility of the family and is provided by home caregivers.

According to the key informants there are no speech therapists, occupational therapists, prosthetic and orthotic personnel or trained CBR workers in Niue. There are services available from one private massage therapist and one counsellor in the health system but no details on these services are available.

6.5 Links with Health System

People in Niue present to the hospital when seeking health assistance. In cases where people require specialist care they will be transported to New Zealand where they are entitled to access health services under the Free Association agreement. Many people, particularly if they are left with a chronic condition or impairment as a result of their illness for example an amputation secondary to diabetes, will then choose to stay in New Zealand and access the disability and rehabilitation services available there.

For those that do return to Niue, or who are managed within the island's health services, once they return to their community there are no follow up rehabilitation services available. The home caregivers draw on what advice and support they can from the visiting Public Health Nurses.

6.6 Issues identified by health workforce

The free association agreement with New Zealand enables Niueans to migrate and settle in New Zealand. Many skilled workers have either chosen to do this or have not returned to Niue

after moving to New Zealand for their studies. This has resulted in a lack of qualified and skilled local personnel in Niue to provide rehabilitation services.

Key informants also expressed concern for the wellbeing of home caregivers as there is currently very little advice and support available to them to support their family member with disabilities.

6.7 Rehabilitation workforce needs

Key informants identified amputations secondary to diabetes as an increasing problem. Of those who return back to Niue after amputation it was reported that many choose not to use their prosthetic limbs. For the government key informant, a priority ought to be to retain qualified people in Niue by providing appropriate incentives to work in the health service.

6.8 Perspective of people with a disability

The DPO key informant echoed the need for local Niuean trained professionals and that their services need to be integrated into the local communities and villages so that all people have the chance of living a happy, healthy life.

Table 5. Rehabilitation Health Workforce - Niue

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Physiotherapists	2264	Physiotherapist	1	0.7	New Zealand	Government – based at the national hospital.	General massages.
Physiotherapy technicians and assistants	3255	Massage therapist	1	0.7	NK	Self employed	Massaging
Community-Based Rehabilitation Worker	Not included in ISCO	Home Caregivers	10	7.1	N/A	Provide services in family/household – not employed	General home caregiving.

* (as nominated by key informants in returned PRHW Template)

7. Country Profile: Palau

7.1 Country Information³⁴

In mid 2011 the population of Palau was estimated to be 20,643³⁵. Most of the population live in the capital, Koror City. The country's economic revenue principally comes from subsistence agriculture, fishing and tourism and in 2007 the total number visitors to Palau was 89,151, more than four times its own population. The country is a democratic republic in free association with the United States of America. Presidential elections are held every four years and the country is divided into 16 states which are represented in the House of Delegates. Traditional values and customs are highly valued as is demonstrated by the existence of the Council of Chiefs which consists of the traditional chiefs from the 16 states and advises the president on traditional laws and customs.

Demographic indicators: ³⁶

- Land area: 444km²
- Population density (2010): 46/km²
- GDP per capita: USD 8,423
- Life expectancy: Males: 66.3 Females: 72.1
- Infant mortality rate: 20.1/1000 live births

7.2 Health³⁷

The provision of health services in Palau is focused at the Belau National Hospital (BNH). There are also four super-dispensaries (community health centres) whose location is based on population and geographical access, and satellite dispensaries that are located for particularly hard to reach, out of the way communities.

³⁴ Unless otherwise indicated country information sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

³⁵ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

³⁶ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

³⁷ Unless otherwise indicated all health information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

Palau has significant health threats from both communicable and non-communicable diseases. Tuberculosis continues to be a significant problem but in recent years non-communicable diseases such as cardio/cerebrovascular diseases, cancer and lung disease have accounted for most mortality. Future health sector planning is focused on addressing chronic diseases and the costs associated with managing and providing services for these conditions.

A mandatory retirement law created crucial shortages in health staff particularly in nursing and allied health categories. In 2010 there were a total of 29 physicians, and 116 nursing staff providing services in the health sector. Seven of the physicians were expatriates³⁸. There are significant efforts underway to train local health workers including a US funded grant to establish a Health Academy in the country's only high school to encourage high school graduates to pursue careers in medicine, nursing and other allied health professions.

7.3 Disability

Palau signed and ratified the Convention on the Rights of Persons with Disabilities in September 2011³⁹. The Omekasang Association is the registered DPO member of the Pacific Disability Forum for Palau. The country does have policies for inclusive education and vocational training which were developed during a time when Palau, with the Federated States of Micronesia and the Republic of Marshall Islands had a closer relationship with the United States of America and received funding for implementing these programs. The updated free association agreement with the United States with a related considerable decrease in financial support means these programs no longer exist. There is also a law that provides people with a disability with a stipend of around USD 50-75 per day however the DPO key informant explained that this does not cover the costs of living in Palau.

7.4 Workforce Data Summary

The interview at the Pacific CBR Forum was attended by the DPO key informant participating in the CBR Forum. There was no completed PRHW Template.

A recent report⁴⁰ states that there are physical therapy and counselling services available at the Belau National Hospital and visiting surgeons for hearing and visual impairments. They also

³⁸ Human Resources for Health Knowledge Hub, University of New South Wales. (2009) *Mapping human resources for health: Profiles from 15 Pacific Island Countries*. Accessed at <http://www.hrhhub.unsw.edu.au/HRHweb.nsf/page/Publications>

³⁹ United Nations Office of the High Commissioner for Human Rights Regional Office for the Pacific. (2012). *Human rights in the Pacific: Country outlines 2012*. Suva.

⁴⁰ Walji, F. & Palmer, M. (2012) *Improving access to and provision of disability services and facilities for people with disabilities in the Pacific: Disability service mapping in the Pacific*. AusAID & CBM Australia-Nossal Institute Partnership for Disability Inclusive Development, Melbourne, Australia.

report that the Shriners Hospital in Hawaii coordinates yearly visits with the Belau National Hospital for surgical services for children with disability.

7.5 Links with Health System

For the population based on the inter-connected islands, accessing the services at Belau National Hospital is not a major issue. However for those on the outer islands the cost of transport suggested as around USD 10,000 per day is a major barrier to travelling to the main island. Most people turn to their local traditional healer first and before seeking assistance at the nurse staffed dispensary.

There are no prosthetic and orthotic services available in Palau. There have been efforts to develop an alliance with Vietnam to provide this however this is complicated by the political obligations to the United States of America under the Compact of Free Association agreement. The key informant also described initiatives to share resources across the Micronesian countries, for example the physiotherapist from the Marshall Islands has travelled to Palau to provide support and assistance.

7.6 Issues identified by health workforce

Issues identified by the DPO key informant that are relevant to a workforce for rehabilitation included the lack of presence in government to provide and coordinate rehabilitation services for people with disability in Palau.

7.8 Rehabilitation workforce needs

Amputations secondary to diabetes is a significant issue in Palau particularly when considered in light of the lack of prosthetic and orthotic services in the country. This issue is also highlighted in the Walji & Palmer (2012) report which states that their respondents that the country needed health promotion workers to address the increasing prevalence of 'lifestyle related diseases' that would benefit from nutrition and lifestyle counselling. Other professions identified in that report included mental health practitioners, speech therapists, occupational therapists and wheelchair technicians.

7.9 Perspective of people with a disability

The DPO key informant in this study stated that the most important priority for people with a disability in Palau was to establish a point in government, such as an Office of Disability, that could be approached to develop and implement appropriate services for people with a disability in Palau. "We really need a champion – but this needs to be a person with disability – to work with government and across the government departments."

8. Country Profile: Papua New Guinea

8.1 Country Information⁴¹

Papua New Guinea is a group of islands that includes the eastern half of the Island of New Guinea. The population was estimated to be 6,888,297 in mid 2011.⁴² The culture is very diverse with approximately 800 different languages and associated cultural groups. The majority of the population (87.5%) lives in rural areas and often in isolated communities that are inaccessible by roads due to a combination of the rugged landscape and lack of infrastructure. The country is divided into 18 administrative provinces, one region and one district⁴³ - the National Capital District around Port Moresby.

The country has substantial natural reserves and there was large growth in the mining sector in the 1990's which boosted the economy. However most of the population continue to live in significant poverty today. The Papua New Guinean government is a parliamentary democracy based on a Westminster model with 109 members and 5 year terms between elections.

Development Indicators⁴⁴

- Land area: 462,840 km²
- Population Density (2010): 15person/km²
- GDP per capita(2006): \$US 897
- Life expectancy: Males: 53.7 Females: 54.8
- Infant Mortality: 56.7/1000

8.2 Health⁴⁵

⁴¹ Unless otherwise indicated country information sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

⁴² Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

⁴³ Central Intelligence Agency. (2012). *The World Factbook (Papua New Guinea)*. Accessed at <https://www.cia.gov/library/publications/the-world-factbook/geos/pp.html>

⁴⁴ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁴⁵ Unless otherwise indicated all health information sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

Health services in Papua New Guinea (PNG) are provided at provincial hospitals and 'rural health services' which comprise health centres, sub-centres, rural hospitals and aid posts. The facilities are normally managed by the government or church providers and funded by the public sector. There are also a number of private and enterprise based facilities as well as a large and unmeasured network of traditional healers. Historically the National Department of Health has been responsible for the provincial hospitals and local governments for the rural health services however there are plans to transition to provincial health authorities who are responsible for all services within their province. This model has been implemented in four provinces. In 2008 PNG had 333 doctors, 2844 nurses and 3883 community health workers (CHW) within the health system.

Communicable diseases continue to be the largest health problem in Papua New Guinea and are the leading causes of mortality and morbidity. Papua New Guinea has the lowest health status of the Pacific region with a life expectancy⁴⁶ of 53.7 for males and 54.8 for females. It is estimated that 15% of a woman's life in Papua New Guinea will be spent living with some form of disability or morbidity.

8.3 Disability⁴⁷

Papua New Guinea has signed and ratified the Convention on the Rights of Persons with Disabilities in June 2011.⁴⁸ The National Board for Disabled Persons was established in 1979 and is the national coordination mechanism and the country has a national plan of action on disability: *Papua New Guinea National Policy on Disability 2005*. There are no available formal statistics on persons with disability in Papua New Guinea.

8.4 Workforce Data Summary

The PRHW Template was returned by one of the service provider key informants and two service providers attended the interview at the Pacific CBR Forum in Nadi. These two key informants were able to provide some information based on the services they provide. This only represents a small section of the complex situation in Papua New Guinea.

⁴⁶ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁴⁷ United Nations Economic and Social Commission for Asia and the Pacific (2010). *Disability at a glance 2010: a profile of 36 countries and areas in Asia and the Pacific*. Accessed at: <http://www.unescap.org/publications/detail.asp?id=1407>

⁴⁸ United Nations Office of the High Commissioner for Human Rights Regional Office for the Pacific. (2012). *Human rights in the Pacific: Country outlines 2012*. Suva.

There are physiotherapists based at the Regional Hospitals most of whom have graduated from the Diploma or Bachelor of Physiotherapy (upgraded in 2009) at the Divine Word University. Key informants described the work of Callan Services, an NGO that runs 17 Special Education Resource Centres across Papua New Guinea. Services at these centres also include physiotherapy, CBR and the provision of assistive devices and 11 of the centres run Early Intervention programs. Callan Services employs approximately 60 CBR workers across the resource centres who provide these services as well as unquantifiable volunteers who support the work. They have also been involved in delivering a certificate level training program in CBR however this has not run in the last two years due to funding constraints. The service also has one speech therapist who is an international volunteer.

The key informants also stated that there are CBR workers within the Department of Community Development. The services that these CBR workers provide is similar to a physiotherapy technician role with a focus on physical health and does not include the broader scope of services that are included within the official WHO CBR model and CBR Matrix

Walji & Palmer (2012) provide some further information about disability services in Papua New Guinea in their report. They state that it has one of the most developed physiotherapy and prosthetics networks which is coordinated by the *National Board of Disabled Persons*. The report describes a *National P&O Centre* in Port Moresby with regional centres in Mt. Hagen, Aitape and Rabaul however does not include further information on the workers who provide the services at the centres.

8.5 Links with Health System

In PNG there is a cadre of community health workers (CHW). These workers typically have had institutional based training in hospitals and by faith based organizations. There are multiple short courses for training these CHW. The CHW's (who remain mostly faith based), work at the community level. At the District level Health Centres there are usually rural doctors, a nursing officer and CHW's. The Nurses do some outreach but it is the CHW who goes to the village. There are also CHW's at the provincial hospitals with Health Extension Officers who are rural trained doctors. Rural trained doctors receive their training at Divine Word University.

At the AID Post (which may cover several villages) there is a community health worker who provides a link to the district hospital and provides the first port of call for people seeking health assistance at the village level. The CHW will refer up through the system to District Health Centres. There is also usually a village birth attendant and in some areas these birth attendants have midwife training. This system was introduced in response to the high infant mortality in PNG.

Despite this system key informants explained that children in PNG (particularly intellectual disability) may go unidentified and this is largely dependent on where they live. It may also occur because the CHW have a primary focus on medical and physical health and wellbeing with less attention to mental health or illness. The special education centres provide early intervention services and 'piccaninny clinics' for mothers and young children. There are some psychiatric wards at the Regional Level Hospitals however these are poorly resourced. If a

person is referred through the system to the regional level hospitals they will have access to these services as well as the physiotherapy services located there.

There is no systematic provision of assistive devices or equipment. The Department of Health does not have a budget for providing these. The workers rely on working with Rotary and other community organisations to get what is needed as well partner organizations such as Callan Services and Motivation Australia. Although there are good networks which help with securing what is needed, there is no guarantee of getting the appropriate assistive device or aid.

8.6 Issues identified by health workforce

The main issue identified is the lack of staff available at the village level. This not only means that many people with disability are not identified and are not aware of the services available to them but also have to travel to access services. Another effect of this is that available workers often are required to fill the roles of more specialised professionals. This limits the range and scope of services and assistance they offer. For example, the CBR workers services reflect those of a physiotherapy technician role instead of a full CBR worker.

8.7 Rehabilitation workforce needs

To address the issues identified the two key informants suggested there would need to be approximately 1 to 4 physiotherapists at the District Hospital Level. This would allow the CBR workers to travel to the villages and be involved in providing CBR according to the Matrix and Guidelines. This arrangement could be supported by an equipment pool at the District Level to provide access to equipment and assistive devices to people in the villages.

To complement such a system and sustain the CBR workers volunteers would be needed. Callan Services has a system of volunteers however to be effective it has to be systematic, cover out of pocket expenses and provide recognition of the role such as certificates. Volunteers are often family members and carers which enhances the sustainability of the system as they have a deep vested interest in the wellbeing of people with disabilities

8.8 Perspective of people with a disability

The only data available from the DPO representatives is from their participation in the workshop as they were unable to attend the interview/ focus group.

Table 6. Rehabilitation Health Workforce – Papua New Guinea

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Audiologists and speech pathologists	2266	Speech Pathologist	1		NK	International volunteer	Hearing testing, diagnosis and speech therapy exercises.
Community-Based Rehabilitation Worker	Not included in ISCO	CBR Worker	Approx 60		Callan Services National Unit	Government – Special Education Resource Centres.	Ear and eye Screening, refraction, physical screening, physio-technician exercises. A small number provide mental health screening, referral, training of local clinic workers/CBR volunteers and family members

9. Country Profile: Republic of Marshall Islands

9.1 Country Information⁴⁹

The Republic of the Marshall Islands is a group of 5 islands and 29 atolls with a population that was estimated to be 54,999 mid 2011.⁵⁰ With very few natural resources and limited industry on the island the country's economy is supported by assistance funds from the United States of America. The country has a democratic political system and has ethnic Micronesian heritage. Traditional hierarchy and culture practices continue to be recognised and adhered to within the judicial and political systems.

Demographic Indicators⁵¹:

- Land area: 181 km²
- Population density (2010): 301/km²
- GDP (2007): USD 2,851
- Life expectancy: Males: 63.7 Females: 67.4
- Infant mortality rate: 21/1000 live births

9.2 Health⁵²

The health services in the Marshall Islands are delivered through the two hospitals – one each in Majuro and Ebeye – and 60 health centres which are based on the outer islands. There are also outreach teams which deliver services through immunization clinics, diabetes clinics, TB and leprosy clinics, prenatal services and health promotion services. In 2010 there were 32 physicians, 115 nurses and 53 community health workers providing health services across these facilities.

Recent data reveals non-communicable disease as the leading cause of mortality and morbidity in the Marshall Islands.

⁴⁹ Unless otherwise indicated all country information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

⁵⁰ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

⁵¹ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁵² Unless otherwise indicated all health information is sourced from: World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

9.3 Disability

The Marshall Islands have signed but not yet ratified the Convention on the Rights of Persons with Disabilities.

The two key informants in this study reported that up until about 10 years ago there were reasonably comprehensive policies and services for people with disabilities that were funded by the US under their Free Association agreement. These policies ensured that inclusive education for children with disability was practised and provided vocational training and employment opportunities for people with disability with incentives for employers to offer on the job training. Funding arrangements with the US have changed under the Amended Compact of Free Association which has resulted in these programs no longer being funded.

9.4. Workforce Data Summary

The information regarding the health workforce in the returned PRHW Template was supplied by the statistics department in the Ministry of Health. Two key informants participated in the interview at the Pacific CBR Forum –one service provider and one DPO member. Summary from the discussion and the returned data was provided to both key informants for comment and feedback was received from both. The following is a collation of this data. There are rehabilitation units based at the two hospitals in Majuro and Ebeye. The centre at Majuro is larger and includes physiotherapy and prosthetic services. There are two physiotherapists based at the Majuro Hospital centre and one at the Ebeye Hospital. Their work is supported by three physiotherapy technicians who have been trained by the physiotherapists. There are three prosthetic technicians who provide services to below knee amputees and foot care from the rehabilitation centre at Ebeye. There are no occupational therapy (OT) professionals based in either rehabilitation units. Informants explained that the physiotherapy staff at the Majuro Rehabilitation Unit have been trained in some OT skills by an international volunteer OT who was based in Marshall Islands between 2000 and 2003. Examples of services they can offer as result of this training include fine motor treatment and fabrication of hand splints and braces. Key informants also stated there are no personnel with training in speech pathology of CBR in the Marshall Islands. In total there are nine staff providing services at the rehabilitation centres.

There are also specialist medical services available at the hospitals and the key informants listed orthopaedic surgeons (2) paediatricians (5), ophthalmologist (1), general surgeons (4) and internists (4). There are currently no NGO's or health facilities that provide rehabilitation services available at the community level in the Marshall Islands and the rehabilitation units do not include outreach or any support (such as transport) to assist people to attend the unit . However service provider informants from the Majuro Hospital rehabilitation unit expressed a desire to extend their services into the community, particularly since participating in the Pacific CBR Forum in Nadi, Fiji in June 2012.

9.5 Links with Health System

The rehabilitation units receive referrals from medical staff based in the hospitals and at the community health centres on the outer islands. Key informants explained that many people in the Marshall Islands first turn to local traditional healers when seeking health assistance. Service provider informants expressed some concern about this as this can present problems for them when people do choose to seek assistance from the health centres as the progression of their condition may limit the treatment options available. This is particularly relevant to diabetes related wound infections and increased likelihood of amputations if appropriate treatment is delayed.

9.6 Issues identified by health workforce

The service provider informants at the rehabilitation units in the hospital expressed their commitment to offering the best quality rehabilitation services to their patients despite limited equipment, resources and staff. They explained there is good communication between the rehabilitation workers and the treating medical staff which assists them to achieve these quality services.

There are few local Marshallese specialist staff available to provide rehabilitation services and most specialist skills (doctors, physiotherapists) are provided by international expatriates who are employed on a short term basis. The local staff providing rehabilitation services have received their skills through short courses and on the job training from the expatriate physiotherapists.

While local staff are often offered permanent positions most of the expatriate staff are employed on a short term contracts (2 years). This means there is always the possibility of losing staff if the contract is not extended or the employee chooses to leave and this can pose challenges to engaging in long term planning and implementing new service models.

Families often have minimal involvement during the inpatient rehabilitation of their family member. The service providers felt more involvement would provide the opportunity to train family members in how to care for and assist the patient for when they are discharged home.

9.7 Rehabilitation workforce needs

Clients most frequently seen by staff at the rehabilitation units are amputations secondary to diabetes, cancer, stroke and congenital disabilities. There needs to be more trained personnel in Marshall Islands and a CBR program to provide services at the village level.

9.8 Perspective of people with a disability

A priority for people with disabilities in the Marshall Islands is that the government have a greater understanding of the importance rehabilitation for people with disabilities. There is a particular need for these services at the village level and the implementation of a CBR program would provide good opportunities at the village level for people living with disability in the Marshall Islands.

Table 7. Rehabilitation Health Workforce – Republic of the Marshall Islands

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Specialist medical practitioners	2212	Paediatrician	5	0.09	Philippines (4) & Solomon Islands (1)	Government - MOH	Diagnosis, assessment & treatment.
		Orthopaedic Surgeon	2	0.04	Philippines	Government – MOH	Diagnosis, assessment, treatment, surgery.
		Ophthalmologist	1	0.02	Philippines	Government – MOH	Diagnosis, assessment, treatment, surgery.
		Internist	4	0.07	Philippines	Government – MOH	Diagnosis, assessment, treatment, surgery.
		General Surgeon	4	0.07	Philippines (2), USA (1), & Solomon Islands (1).	Government – MOH	Diagnosis, assessment, treatment, surgery.
Physiotherapists	2264	Physiotherapist	3	0.05	Philippines (2), Fiji (1)	Government – MOH	Assessment and therapy treatment
Medical and dental prosthetic technicians	3214	Prosthetic technician	3	0.05	NK	Government – MOH	Provision of prosthetic limbs for below knee amputations and foot care.
Physiotherapy technicians and assistants	3255	Physiotherapy Technician	3	0.05	Trained on the job by physiotherapists	Government - MOH	Providing assistance and/or therapy treatments under the supervision of physiotherapist/s (e.g. gait training, strengthening exercises)

* (as nominated by key informants in returned PRHW Template)

10. Country Profile: Samoa

10.1 Country Information⁵³

The Independent State of Samoa has a population which was estimated to be 183, 617 in mid 2011.⁵⁴ Geographically it consists of two main islands, Savaii and Upolu and several smaller islands. The capital is Apia on Upolu island, which hosts the urban population of the country (approximately 36,000). There are three rural regions NorthWest Upolu, Rest of Upolu (including two outer islands) and Savaii.

Samoa is governed by a democratic parliament based on the British Westminster System which incorporates traditional systems by reserving seats of parliament for the traditional Samoan village chiefs known as the Matai. The Matai are elected as chiefs by their family members.

Demographic Indicators:⁵⁵

- Land area: 2785 km²
- Population density (2010): 66/km²
- GDP (2008): USD 2672
- Life expectancy: Males: 71.5 Females: 74.2
- Infant mortality rate: 20.4/1000 live births

10.2 Health⁵⁶

The health system is managed and principally funded by the government's Ministry of Health through the National Health Service. The *Health Sector Plan 2008-2018* nominates challenges and strategies to work towards the vision of 'a healthy Samoa'. Recent policy and health system development have introduced measures to strengthen community and primary care services as

⁵³ Unless otherwise indicated all country information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

⁵⁴ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

⁵⁵ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁵⁶ Unless otherwise indicated all country information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

well as health promotion and prevention interventions. Non-communicable diseases pose a significant threat to the health of Samoans with prevalence rates 57% for obesity, 23.1% for diabetes and 21.4% for hypertension. It is also well accepted that there are high rates of undiagnosed hypertension and diabetes in the community.

11.3 Disability

Samoa is not a signatory to the Convention on the Rights of Persons with Disabilities.⁵⁷ The portfolio for disability affairs sits within the Ministry of Women, Community and Social Development and the disability action plan *Samoa National Policy on Disability* was released in 2009⁵⁸. The policy states that with the increasing incidence of heart disease, diabetes, Vitamin A deficiency and road accidents the prevalence of disability in Samoa is likely to be higher than the United Nations' estimate of 10% of the population. The policy identifies 7 core outcome areas with associated objectives and strategies for achieving these objectives. The Taskforce on Disability is responsible for monitoring the implementation of the National Disability Policy. According to key informants the 2011 census included several specific questions on disability to result in around 2000 people with disabilities in Samoa.

10.4 Workforce Data Summary

All of the Pacific CBR Forum participants from Samoa attended the interview during the Forum. The PRHW Template was returned by one of the service provider key informants. The information presented is a combination of data in the completed Template and from discussion in the group interview.

A total of 17 workers with training in rehabilitation skills two of which are overseas expatriates was reported. Four of these have professional degrees, one has completed a certificate level training degree in community rehabilitation and the remainder have learnt their skills through on the job training from local and visiting professionals. The Motototua National Hospital has one physiotherapist and a physiotherapy aide. A previous report⁵⁹ also stated the hospital provides

⁵⁷ United Nations Office of the High Commissioner for Human Rights Regional Office for the Pacific. (2012). *Human rights in the Pacific: Country outlines 2012*. Suva.

⁵⁸ Ministry of Women, Community and Social Development, Government of Samoa. (2009) *Samoa National Policy on Disability*. Accessed at: <http://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCEQFjAA&url=http%3A%2F%2Fwww.apids.org%2FUSERIMAGES%2FNational%2520DISABILITY%2520Policy%2520%25202011.doc&ei=c1ZAUMK2leuTiQej-4H4Dg&usq=AFQjCNGEUTRUOhLe5ZcTMyXNK4v3feJu1w&sig2=uNZEXHvl0u8Rw9MCZlJFqg>

⁵⁹ Walji, F. & Palmer, M. (2012) *Improving access to and provision of disability services and facilities for people with disabilities in the Pacific: Disability service mapping in the Pacific*. AusAID &CBM Australia-Nossal Institute Partnership for Disability Inclusive Development, Melbourne, Australia.

P&O services however this information was not included in the returned PRHW Template. The hospital has one New Zealand trained orthopaedic specialist and 3 paediatricians, two of which trained at the Fiji School of Medicine and the other in New Zealand. These professionals are available to consult people with disability, provide specialist services such as surgical interventions and also refer clients to the rehabilitation services in Samoa. There is also one acupuncture technician, an expatriate Chinese doctor who works within the National Health Service.

There is an NGO, the Loto Taumafai Society for People with Disabilities that provides rehabilitation services including an early intervention program for 300 clients under the age of 7⁶⁰. Key informants reported that Loto Taumafai currently has one overseas volunteer occupational therapist who assists the 10 Field Workers for the early intervention program. In Apia there is also one private physiotherapist who is contracted to provide physiotherapy support to the program on a part time basis. This physiotherapist also manages a caseload of private clients at the community level and is supported by two physiotherapy aides who she has trained. Another NGO, *SENESE* employs one speech therapist who is an expatriate. *SENESE*, in partnership with the Motototua National Hospital provides hearing and vision support and assistive devices including cochlear devices. This service also provides a training program and tele-health services through Skype with professionals based in Australia. For those outside the urban base of Apia and its surrounds there are virtually no rehabilitation services. The community nurses are reportedly overwhelmed with their existing duties and do not have the capacity to include rehabilitative interventions within their services.

10.5 Links with Health System

The key informants explained that acute care for people who acquire a disability (for example after a stroke) is centrally organized on Upolu through the National Health Service at the national hospital where they provide medical care and orthopaedic clinics. Available rehabilitation services include physiotherapy (from the one physiotherapist at the hospital) and support from a PT assistant who has completed the Community Rehabilitation Assistant training course at Fiji National University. There are also limited city based outpatient clinics and some community follow up visits (a few hours one a fortnight). The other major island, Savaii, also has a hospital however there are no physiotherapists based at this facility. Other medical services across Samoa are provided through four community health centres which are managed by a nurse with visiting doctors.

The Community Nurses provide primarily medical treatment services, including home visits for wound dressings, as well as immunization programs and school visits. Key informants explained that the community nurses are under-resourced and rely on local transport and/ or walk for their

⁶⁰ Walji, F. & Palmer, M. (2012) *Improving access to and provision of disability services and facilities for people with disabilities in the Pacific: Disability service mapping in the Pacific*. AusAID & CBM Australia-Nossal Institute Partnership for Disability Inclusive Development, Melbourne, Australia.

community visits. It is therefore unlikely that this service would be able to incorporate outreach rehabilitation services.

For those who live on Upolu and can afford it there are private nursing services available. Key informants also mentioned that there is also one home for the elderly on Upolu which is managed by a Catholic NGO and includes some people with mental illness.

Many families in Samoa do not present to the hospital as the first 'port of call' for a health service for conditions associated with disability such as stroke, developmental delay in children and serious foot infections. Very often they turn to a local traditional healer first and it could be several years before a person seeks services from a hospital. There was some frustration expressed that this delay in presenting means that it is too late for the services provided to be effective.

Key informants were positive about the National Health Service being willing to adopt service models that they have seen be effective. For example, the Samoa Vision Services whose staff and salaries are now supplied by NHS but was originally managed and funded by an NGO. Another example is the training of teachers in school to do vision screening which the government now wants to extend to younger children in the community. This model is now also being repeated with audiology services where it is being integrated into hospital care.

10.6 Issues identified by health workforce

A major issue with the current situation is the scarcity of community based rehabilitation services. Most of the community services are managed and funded by NGO's. Another challenge is to spread knowledge in the community about the benefits of medical care, including rehabilitation. Once NGO's start working in the community, and people start to see the effects of this and the success in individual's lives, then people are more likely to seek out rehabilitation/ hospital services.

Ideally therapists recruited for the Samoan rehabilitation health workforce would be Samoans. This requires high school students to understand that there are careers in the rehabilitation workforce. Most high school students would be familiar with doctors or nurses and with lawyers and teachers but very few would know about PT, OT, SP, or other allied health so would be unlikely to apply for an AusAID or NZAID scholarship to study these programs.

There are very few specialists in Samoa and real challenges for local staff to upgrade their qualifications as they are unable to leave to do so, given there is no locally available specialist supervision. Most specialist services are provided by visiting professionals for example specialists from Royal Institute for Deaf and Blind Children in Australia who come for three visits a year.

10.7 Rehabilitation workforce needs

The rising prevalence of NCD's in Samoa is recognised by the rehabilitation staff who participated in this study with diabetes complicated amputations representing a significant

proportion of their client base. Spinal cord injuries from sports injuries and falls, particularly from trees, also represent a significant need for services in the community.

The key informants also suggested that children and adults with communication, speech and language difficulties such as those with autism, intellectual disability, deaf and hearing impaired are in great need of Samoan speaking speech therapists to provide assistance. The Walji and Palmer Report (2012) also noted a need for occupational therapists, P&O technicians and wheelchair technicians that are permanently based within Samoa.

Perspective of people with a disability

A DPO, Nuanua o le Alofa is a self help advocacy organization which recently started another sub centre in Savaii. The organization worked with the Ministry of Women, Community and Social Development which is the focal point on disability to identify and bring people from the villages to a meeting about the launch of this sub centre.

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Table 8. Rehabilitation Health Workforce - Samoa

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Specialist medical practitioners	2212	Orthopaedics Specialist	1	.005	Otago University (NZ)	Private/National Health Service	Assessment, Diagnosis, Surgery, Referral for Surgery and other rehabilitation services
		Paediatrician	3	0.02	Fiji School of Medicine (2) & Auckland University (NZ)(1)	Private (2) National Health Service(1)	Assessment, Diagnosis, Treatment, Referral for other rehabilitation services
Physiotherapists	2264	Physiotherapist	2	0.01	Otago University (NZ) (1) /Fiji School of Medicine (1)	Private/NGO (1) National Health Service – national hospital (1)	Assessments, Diagnosis, Treatments, Referral for other medical services. Private PT provides Community Rehabilitation Services.NHS PT provides services at the hospital.
Audiologists and speech pathologists	2266	Speech Therapist	1	0.005	...(no speech therapy course in Pacific Islands)	NGO	...
Health professionals not elsewhere classified	2269	Occupational Therapist	1	0.005(overseas – JICA volunteer)	Based at NGO	...
Physiotherapy technicians and assistants	3255	Physiotherapy Assistant	1	0.005	Fiji School of Medicine	National Health Service	Treatment with supervision from physiotherapist.
Health associate professionals not elsewhere classified	3259	Physiotherapy Aide	2	0.01	Trained locally by private physiotherapist	Private	Treatment with supervision from physiotherapist.
Community-Based Rehabilitation Worker	Not included in ISCO	Field Workers	10	0.05	Trained locally by local and visiting overseas physiotherapists	NGO	Early intervention program

* (as nominated by key informants in returned PRHW Template)

11. Country Profile: Solomon Islands

11.1 Country Information

The Solomon Islands is an archipelago of over 900 coral atolls and a population that was estimated to be 553,254 in mid 2011.⁶¹ The majority of the population are ethnic Melanesian and only 18% live in urban areas, most of which are based in the capital, Honiara. In 2010 the country successfully held its first democratic election since the civil unrest in 2003.

Demographic Indicators: ⁶²

- Land area: 30,407 km²
- Population density (2010): 18/km²
- GDP (2008): USD 1,014
- Life expectancy: Males: 60.6 Females: 61.6
- Infant mortality rate: 24.3/1000 live births

11.2 Health⁶³

There are a total of eight hospitals which are managed by the Ministry of Health (MOH) in the Solomon Islands. The National Referral Hospital is based in Honiara and serves the Guadalcanal Province, and the other seven hospitals are based in one of the remaining eight provinces leaving one province without a hospital. The rural areas are serviced by health centres and nurse aide posts spread throughout the country.

Communicable and non-communicable diseases are among the leading causes of mortality and morbidity in the Solomon Islands with recent evidence suggesting non-communicable diseases are an increasing issue.

11.3 Disability

The Solomon Islands has signed but not yet ratified the Convention on the Rights of Persons with Disabilities.⁶⁴ The Community Based Rehabilitation Division within the Ministry of Health

⁶¹ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

⁶² Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁶³ Unless otherwise indicated all health information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

and Medical Services is the government focal point for disability affairs. In 2010 UNESCAP reported that the Solomon Islands were in the process of developing a national coordination mechanism and had a national policy: *The Solomon Islands National Policy on Disability 2005-2010*.⁶⁵ In 2005 the Community Based Rehabilitation Division conducted a nationwide survey with the purpose of identifying people with disability in the community and their associated needs. The survey identified a total of 14, 403 people with disability and states this represents 3.52% of the total population with almost all from rural communities (96%). Vision impairment was the highest reported disability (27%) followed by physical impairments (20%) then hearing impairment (17%) and those aged over 51 represented almost half (48%) of those identified. The vast majority (82%) reported that their disability had a moderate to severe impact on their life. The four key informants in this study discussed their concerns with the data collection process and their reluctance to rely on this data as accurate. One of the concerns raised was the collectors understanding of disability and skills to correctly identify people with a disability along with issues with the translation of the technical English language to pidgin and vice versa to record the disability on the form. The CBR Coordinator, and of the key informants, is currently working to update and revalidate the data through the CBR program.

The latest census in 2009 included a question on disability however again key informants reported issues with the collection of the data and stated there were many reports of the question not being asked by the census officers.

11.4 Workforce Data Summary

Several efforts were made to source data from the Ministry of Health and Medical Services without success. Information regarding the current workers in the CBR program was provided from the Chief Rehabilitation Officer. Four key informants attended the interview at the Pacific CBR Forum including one government official, two service providers and one DPO member.

The National Referral Hospital (NRH) in Honiara has a Physiotherapy Department, a Prosthetics & Orthotics Department, a Speech Therapy Department and an Occupational Therapy (OT) Department. As there are no local trained OT's or speech therapists these departments have been manned by volunteers from Japan under the JOCV volunteer program and Australian volunteers under the Australian Volunteer International program. The physiotherapists take on the role of OT's when there are no international professionals in this position, which was the situation at the time of writing this report. Services from the physiotherapist include inpatient treatment as well as setting up home programs and programs for the CBR field and rehabilitation aides to follow up with after discharge. There was no data available on the number

⁶⁴ United Nations Office of the High Commissioner for Human Rights Regional Office for the Pacific. (2012). *Human rights in the Pacific: Country outlines 2012*. Suva.

⁶⁵ United Nations Economic and Social Commission for Asia and the Pacific (2010). *Disability at a glance 2010: a profile of 36 countries and areas in Asia and the Pacific*. Accessed at: <http://www.unescap.org/publications/detail.asp?id=1407>

of physiotherapists based at the NRH. Key informants explained that there are no Rehabilitation Medicine Specialists at the hospital or in the Solomon Islands.⁶⁶

The current Community-Based Rehabilitation model bases CBR Field Workers or Community Rehabilitation Aides at the Nurse Aide Posts. Currently there is at least one worker based in all but two provinces. The current CBR workers include those who completed an earlier training course in CBR and those who have been acting in this role for some time as volunteers and have learnt their skills 'on the job'. The information provided by the Chief Rehabilitation Officer suggests that the Ministry of Health and Medical Services has a total of 16 positions for CBR workers, 5 of which are vacant at the time of writing the report. A number are also on study leave completing the Diploma of Community Based Rehabilitation at the Solomon Islands College for Higher Education (SICHE).

The *Solomon Islands Red Cross Society* runs the *Special Development Centre* which provides special education and some therapy services in conjunction with CBR workers who use the rooms and facilities at the Centre to see children and their families. Families from rural areas can attend the school for several weeks/months with their child where they will be trained and supported to work with their child before they return to their community.

11.5 Links with Health System

According to the key informants the line of referral for health services in Solomon Islands is nurse aid (aide post) to a registered nurse (based at a rural health clinic or area health centre) to the provincial hospital and if necessary to the NRH in Honiara. The Ministry of Health and Medical Services funds transport for patients who travel between health facilities through the official referral system. If referred to the NRH the client will receive services from the rehabilitation workers based at the hospital. When discharged the client returns to their home and the CBR worker should be contacted. This depends on the thoroughness of the referral from the hospital. If a CBR worker is not available there are no other services for rehabilitation at the community level.

There is a psychiatric nurse based at each provincial hospital. They are able to provide medication under the supervision and advice of a doctor via consultation over the radio. Key informants acknowledged that it often takes some time before people access these services, particularly from the outer villages

11.6 Issues identified by health workforce

⁶⁶ Standard surgical procedures such as club foot and eye surgery are available at the National Referral Hospital but many are completed by visiting specialists. Walji, F. & Palmer, M. (2012) *Improving access to and provision of disability services and facilities for people with disabilities in the Pacific: Disability service mapping in the Pacific*. AusAID & CBM Australia-Nossal Institute Partnership for Disability Inclusive Development, Melbourne, Australia.

There are many people in Solomon Islands who may never access the rehabilitation services. There are still areas of the Solomon Islands that do not have CBR workers and the cost of transport makes it difficult for workers to reach all the clients within their area of service. The cost of transport is also a major barrier to people accessing services as the Ministry of Health and Medical Services only funds transport for those who are referred through the system. This is therefore reliant on the health workers level of understanding of disability. In many cases people have to fund their own travel if the nurse aide does not refer them on for further services.

There are also challenges associated with work opportunities for those who are currently providing services. The Ministry of Health and Medical Services policy requires that posts within the health service the employee have a qualification from an accredited institution. There are CBR field workers who have worked in the role for many years with skills and experience from on the job training but do not have a qualification. The two year Diploma of Community Based Rehabilitation at SICHE was established to address this issue. The course is currently in pilot phase with the first intake of 17 students in 2011 due to graduate at the end of 2012. The government has funded 11 of the students to complete the course and the remaining 6 students have been sponsored by their employer, the Ministry of Health and Medical Services. Key informants hope that there will be another intake in 2013 so that a steady supply of CBR workers can be established. It is also hoped that the graduates will have a broader skill set and be able to provide a more comprehensive service than currently.

11.7 Rehabilitation workforce needs

The four key informants nominated clients with stroke, cerebral palsy and amputations as the most frequently seen by the current rehabilitation workforce.

The two key informants involved in the delivery of the CBR services in Solomon Islands presented their vision for addressing the rehabilitation and workforce needs in Solomon Islands.

Scenario 1:

The Ministry of Health recruits more CBR workers into the public health service to increase the coverage of the service. The service needs to be strengthened both in numbers and broader rehabilitation skills. Ideally there would be skills and knowledge across a full rehabilitation team at both the provincial and national level. Given the challenges associated with travel there needs to be a provincial system to provide services closer to the population. At the provincial centres there would be an OT or PT managing and coordinating the CBR program. In addition there would be a P & O technician, and a P & O trained CBR worker for the field. At the NRH, in addition to the physiotherapy department there would a P&O who is also trained as a CBR worker and therefore has the broad skill set to coordinate and provide community rehabilitation services when P&O services are not required. There would also be a field worker based at the hospital to support this program at the national level.

Scenario 2:

At the national level there will be a well functioning Physiotherapy /Occupational Therapy/Speech Pathology and P&O department all with trained staff and based at the NRH. At

the provincial hospitals there will be one person with specialist rehabilitation skills coordinating CBR at the provincial level and providing support to the CBR workers out in the field. This coordinator needs to have a rehabilitation background to act as a mentor for the field workers. There will be posts available for field workers at each of the area health centres. They will be working with self help groups and have well established links with the DPO's. There will be an ongoing partnership with the nurses at the area health centres. The CBR Field Workers would be aware of every person who has a disability in the catchment area and their needs. They will also know where to refer for example to DPO or to Red Cross for special education. A total of 58 CBR Field workers are required for this vision.

Another priority is to have decentralized special education services into the provinces. This would include specialised teachers who are integrated into an inclusive education system to provide extra support for classroom teachers alongside the CBR field workers.

11.8 Perspective of people with a disability

The DPO key informant supported the ideal scenarios. He also articulated three priorities for meeting the rehabilitation needs of people with a disability in the Solomon Islands. There were: (i) To speed up action transforming advocacy into real work and complement and support what has been done in providing rehab services – secure funding for training and support places in the training course; (ii) To achieve a 50% reduction in the number of people waiting for assistive devices; and (iii) To establish an inventory of people with disability and their needs. This would include information on what they need, where are they located, where they need services and/or assistive devices and equipment.

Table 9. Rehabilitation Health Workforce - Solomon Islands

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Community-Based Rehabilitation Worker	Not included in ISCO	Community Rehabilitation Aide	7 (3 on study leave)	0.01	Trained locally.	Government – Ministry of Health (has a total of 8 posts available – one is vacant)	
		CBR Field Worker	2	0.004	Trained locally	Government – Ministry of Health (has a total of 4posts available – two are vacant)	
		CBR – Aide Assistant	2	0.004	Trained locally	Government – Ministry of Health (has a total of 4posts available – two are vacant)	

* (as nominated by information provided by key informant)

12. Country Profile: Tonga

12.1 Country Information⁶⁷

The Kingdom of Tonga's population was estimated to be 103,682⁶⁸ in mid 2011 and is spread over 49 of the 171 islands that are divided into three administrative groups; Vava'u, Ha'apai and Tongatapu. The majority of the population live on Tongatapu which has the capital, Nuku'alofa. The urban based population is around 23% and agriculture is the principal player in the economy. It is also estimated that approximately 100,000 Tongans live overseas, mainly in Australia, New Zealand and the United States) and private remittances sent home to family members is becoming more significant factor in the country's economy. Other sources of income include fishing (though decreasingly so due to poor yields) and the growing tourism industry.

Tonga is a constitutional monarchy with a Cabinet (appointed by the Monarch) Privy Council (made up of all members of Cabinet and the Monarch) and 30 seat Legislative Assembly.

Development Indicators:⁶⁹

- Land area: 650 square km
- GDP(2010): \$2691
- Life expectancy: Males: 67.3 Females: 73
- Infant Mortality 19/1000

12.2 Health⁷⁰

Health services are provided free of charge through and managed by the Ministry of Health. There are four hospitals in Tonga: Vaiola Hospital in Nuku'alofa and three district hospitals on outer islands. There are also 14 primary health centres at the community level with Public Health Nurses who provide basic treatment and refer to the district and national hospitals if necessary. However transport between the islands is difficult and expensive. Approximately 75% of the population live on Tongatapu, the main island in Tonga and therefore have

⁶⁷ Unless otherwise indicated country information is sourced from: World Health Organisation. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*.

⁶⁸ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

⁶⁹ All indicators sourced from Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁷⁰ Unless otherwise indicated all information on the health system is sourced from World Health Organisation. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*.

reasonable access to the national hospital and its services. In 2010 there were 58 doctors and 379 nurses employed within the health services in Tonga.

In recent years there has been a significant rise in non-communicable diseases and associated risk factors, particularly obesity, and recent reports suggest they pose the most significant health issue for Tongan people.

12.3 Disability

Tonga has signed, but not yet ratified, the Convention on the Rights of People with Disabilities⁷¹. The government has made some recent changes towards addressing the needs of people with a disability including recently appointing a focal point for disability in the Ministry of Health and drafting a National Disability Policy. In 2005 a National Disability Identification Survey⁷² identified 2782 people with a disability in Tonga which equates to 2.8% of the population. This it is suggested is a significant underestimate and does not include people with mild, or less visible, disabilities. The survey also reports that there are some negative attitudes and social stigma attached to disability which discourages people from nominating either themselves or a family member as a person with disability.

12.4 Workforce Data Summary

The PRHW Template was returned by the government key informant who is also a service provider within the Ministry of Health and completed the Template in consultation with the other service provider key informant (NGO) and the DPO key informant who were both participants in the Pacific CBR Forum. The information presented here comes from the template and interview at the Forum.

The formal rehabilitation services within the health system are limited to the physiotherapy department at the Vaiola Hospital.⁷³ The department is manned by one physiotherapist who graduated from the Fiji School of Medicine. At Vaiola Hospital there is one paediatric specialist and one psychiatric specialist who contribute to health rehabilitation services for people with a disability in Tonga.

Beyond what is available at the Vaiola Hospital the rehabilitation services in Tonga are provided by visiting volunteer or expatriate professionals and volunteers and workers they have informally trained during their tenure.

Services available at the community level include the Red Cross Society OTA which is a day program for children with intellectual disability. The program employs nine teachers who have

⁷¹ United Nations Office of the High Commissioner for Human Rights Regional Office for the Pacific. (2012). *Human rights in the Pacific: Country outlines 2012*. Suva.

⁷² Tonga Red Cross Society & Disability Action Committee (DACTION). (2006). *Tonga National Disability Identification Survey*.

⁷³ Motivation Australia & Naunau 'o e 'Alamaite Tonga Association (NATA). (2011). *Provision of mobility devices and support services for people with a mobility disability in Tonga*. (p9).

received informal training from visiting therapists. Likewise the Mango Tree Foundation, which is run by two expatriates, organise visiting therapists to work with the clients and train the volunteers and parents of the children at the centre⁷⁴. Key informants reported that there are no prosthetic and orthotic personnel in Tonga. However there was a visiting team of professionals from the USA who ran a one month clinic at the Vaiola Hospital⁷⁵. They also reported that there are no occupational therapy or speech pathology professionals based in Tonga.

The Tongan rehabilitation health workforce therefore consists of 12 personnel supplemented by visiting overseas and local volunteers. There are a handful of private services such as acupuncture and hydrotherapy from Chinese expatriates available in the urban area of Nuku'alofa and to those who are able to pay. There is also an informal system of traditional community volunteers who work with people in their community who are unwell or require extra assistance. They described this system as an informal Community-Based Rehabilitation program that has existed for centuries within the culture. It is impossible to quantify the number of people who are involved in providing this assistance as there are no records kept and their training is informal and based on traditional healing ways handed down through generations.

12.5 Links with Health System

Most people in Tonga first turn to the formal health care system when seeking health assistance. At the community level public health nurses refer patients who require rehabilitation services (such as mental health or stroke) to the district and national hospitals. According to the key informants the public health nurses have been discouraged from providing services for people with stroke and diabetes and encouraged instead to focus on reproductive health, vaccination, maternal & child health and HIV. It was suggested that this is because these areas attract more funding from donors.

Attendance at the hospital for services is dependent on a family's ability to fund travel to Nuku'alofa (capital). Medical staff refer patients for physical rehabilitation from the one physiotherapist or to the mental health unit as necessary. Many people, once discharged from the hospital, will also seek assistance from traditional healers in their community whose treatments include herbal remedies as well as recommended exercises and manual therapies

⁷⁴ The feasibility study conducted by Motivation Australia reports this is organised through the Altus Trust. Motivation Australia & Naunau 'o e 'Alamaite Tonga Association (NATA). (2011). *Provision of mobility devices and support services for people with a mobility disability in Tonga*.

⁷⁵ According to feasibility study conducted by Motivation Australia this one month prosthetic clinic in 2011 was organised by the *Church of the Latter Day Saints (LDS) Humanitarian Programme* and run by a team of prosthetists from the United States who fabricated and fit prosthetic limbs for patients at Vaiola Hospital. They also provided 'on the job' training for three LDS volunteers and the physiotherapist. It does not appear that these services have continued and currently there is no provision of prosthetic limbs for people who have undergone an amputation in Tonga. Motivation Australia & Naunau 'o e 'Alamaite Tonga Association (NATA). (2011). *Provision of mobility devices and support services for people with a mobility disability in Tonga*. (P8,9)

such as massage. There have also been public awareness programs for mental health services through the radio and television introduced by the hospital staff.

12.6 Issues identified by health workforce

Key informants expressed concern at the reliance on visiting professionals or travel overseas for training and learning new skills in rehabilitation. The limited number of personnel involved in providing health rehabilitation services was also identified as a significant challenge making it difficult to extend their services into the community. The physiotherapist at Vaiola Hospital has reported difficulties with meeting the needs of inpatient, outpatient and sporting team commitments.⁷⁶ In addition the key informants explained that the community based public health nurses are either resistant or unable to include rehabilitation services in their scope of services provided at the community level.

The government key informant also highlighted the rotating nurse system in the hospital as a challenge to nurses having the opportunity to build up specialist skills. He has come to an arrangement within the Mental Health Unit that ensures there is always at least one more experienced nurse on rotation to assist with the training of new staff. However there is no system to allow for specialist positions or postgraduate training in mental health nursing and therefore no specialist skills in mental health nursing beyond what is learnt 'on the job'.

12.7 Rehabilitation workforce needs

Intellectual disability, stroke, cerebral palsy, and psychiatric illnesses were nominated as the most frequently seen cases. There was a strong need identified for local professionals with specialist rehabilitation training to support and train other staff within the health and associated rehabilitation systems in Tonga. Physiotherapy was mentioned as a priority - to provide up to date skills and training to other staff members such as volunteers at The Red Cross Society - and occupational therapy⁷⁷ - to provide support for life skills particularly for clients with intellectual disability and mental health issues.

12.8 Perspective of people with a disability

The number one priority was that the country seeks to ratify the Convention on the Rights of Persons with a Disability. A high value was also placed on services that offer vocational and life skills training to people with disability. One example was a computer skills training course recently run by the Mango Tree Centre. Access to good quality assistive devices was also mentioned as a high priority. The Motivation Australia & NATA feasibility study in 2011 also reports a significant lack of assistive mobility devices as those that are available often being

⁷⁶ Motivation Australia & Naunau 'o e 'Alamaite Tonga Association (NATA). (2011). *Provision of mobility devices and support services for people with a mobility disability in Tonga*. (p9).

⁷⁷ According to the Tonga Ministry of Health Report 2010 the Ministry of Health has established a position for an occupational therapist but it has never been filled.

grossly inadequate for the individual or the Tongan environment and therefore of no use to their owner.⁷⁸

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⁷⁸ Motivation Australia & Naunau 'o e 'Alamaite Tonga Association (NATA). (2011). *Provision of mobility devices and support services for people with a mobility disability in Tonga*.

Table 10. Rehabilitation Health Workforce - Tonga

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Specialist medical practitioners	2212	Psychiatric Specialist	1	0.001	University of the South Pacific and University of Auckland.	Ministry of Health (Vaiola Hospital)	Assessment, Diagnosis, Referral, and Treatment. Mainly based in hospital but does conduct community visits.
		Paediatric Specialist	1	0.001	University of Sydney	Ministry of Health (Vaiola Hospital)	Assessment, Diagnosis, Referral and Treatment.
Traditional and complementary medicine professionals	2230	Traditional Healers or Folk Healers.	Many	NK	Apprentice style training handed down from one generation to the next	Self – employed	Mainly provide herbal remedies but treatments do include exercises and massage.
Physiotherapists	2264	Physiotherapist	1	0.001	Fiji School of Medicine	Ministry of Health (Vaiola Hospital)	Assessment, treatment, referral Inpatient and outpatient services from the hospital.
Audiologists and speech pathologists	2266	General therapists in hearing, speech and language	9	0.09	Were locally trained by visiting physiotherapists.	The Red Cross Society Tonga, OTA	Assessment, advice, referral and treatment
Community health workers	3253	Lay people	Many	NK	Informal local apprentice style	Volunteers attached to local community and church groups.	Care and support in the community post illness. Source assistive devices through informal and social networks in Tonga and overseas.
Community-Based Rehabilitation Worker	Not included in ISCO	CBR Workers	2	0.02	Overseas (South Korean expatriates)	Mango Tree Respite Centre (NGO)	Assessment, advice, referral and treatment. Visiting therapists work with the staff/volunteers to develop individual therapy programmes.
		Alonga Residential Centre volunteers	4	0.04	Overseas and local training.	Alonga Residential Centre	Assessment, advice, referral and treatment

* (as nominated by key informants in returned PRHW Template)

13. Country Profile: Tuvalu

13.1 Country Information⁷⁹

Tuvalu has a population which was estimated to be 11, 206 in mid 2011⁸⁰ which is spread over nine coral islands with Funafuti as the main island/capital. With poor quality soil for agriculture, very limited natural resources and virtually no tourism industry the country is very dependent on foreign aid. It is also particularly vulnerable to rising sea levels and natural disasters sitting at just 16 ft above sea level.

Demographic Indicators:⁸¹

- Land area: 26 km²
- Population density (2010): 429/km²
- GDP per capita: USD 1,831
- Life expectancy: Males: 61.7 Females: 67.1
- Infant mortality rate: 17.3/1000 live births

13.2 Health⁸²

The main island, Funafuti, has the country's only hospital, the Princess Margaret Hospital. There are also nine medical centres across the country with one based on each island and staffed by nurses. In 2009 there were 11 doctors employed by the Ministry of Health including four Cuban doctors who were recruited under an agreement between the Cuban and Tuvalu governments. The presence of the Cuban doctors allowed some of the Tuvalu doctors to pursue further specialization studies in Fiji.

⁷⁹ Unless otherwise indicated all country information is sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

⁸⁰ Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

⁸¹ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁸² Unless otherwise indicated all health information is sourced from : World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

Non-communicable diseases are the leading causes of mortality and morbidity in Tuvalu. The lack of a reliable supply of safe drinking water also places the population at particular risk of waterborne disease and in 2009 all households were provided rainwater tanks to limit this.

13.3 Disability

Tuvalu has not signed or ratified the Convention on the Rights of Persons with Disabilities.⁸³ The Fusi Alofa Association is the registered DPO member of the Pacific Disability Forum and the portfolio for disability affairs sits within the Ministry of Home Affairs.

13.4 Workforce Data Summary

The PRHW Template was returned by one of the service provider key informants who completed the Template in consultation with the DPO and government key informants. The interview was attended by two DPO members, one service provider and one government official.

The Princess Margaret Hospital has a small number of professionals with skills and qualifications to provide rehabilitation services. The specialist medical practitioners consist of one surgeon, one anaesthetist, one paediatrician and one obstetrics and gynaecology specialist. However there is no rehabilitation specialist. There is one physiotherapist based at the hospital who provides services both in the hospital and, when time is available, at home. The physiotherapist provides services across a range of areas including orthopaedic, neurological and paediatrics as well as covering other professional discipline areas such as speech and occupational therapy. The Tuvalu Red Cross runs a volunteer home visiting program for elderly people and people with disabilities. These services include counselling, emotional support and some physical rehabilitation. The volunteers have not received any specific training in rehabilitation skills. This service is only available to those who live on the main island. There are no personnel with training in rehabilitation skills on the outer islands and no outreach programs from the main island. There are also no prosthetic and orthotic personnel or services in Tuvalu.

13.5 Links with Health System

The community health clinics refer to the hospital on the main island if a case presents that is beyond their capability. There are boats that depart from the outer islands twice a week; there is no special service for emergency cases. If necessary the patient can be transferred to Fiji for more specialist care and key informants referred to some cases even being referred to New Zealand.

Once on the Funafuti, the patient may be referred for physiotherapy at the hospital but the home visiting service after discharge is only available on the mainland. The DPO key informants also reported that the home visiting program, which also includes support from nurses, is

⁸³ United Nations Office of the High Commissioner for Human Rights Regional Office for the Pacific. (2012). *Human rights in the Pacific: Country outlines 2012*. Suva.

inconsistent and the services are infrequent with very few referrals from the hospital on discharge. The Fusi Alofa Association also provides assistive devices to people who need them, however they are unable to cater for the current demand and need for these devices.

13.6 Issues identified by health workforce

The limited reach of the available professional services to patients at the hospital and the lack of skill mix are major issues with the current rehabilitation service. Lack of training available for volunteers who are supporting people with disability living in the community is also a significant issue.

13.7 Rehabilitation workforce needs

Amputations secondary to diabetes and stroke were identified by the key informants as the most significant causes of disability in Tuvalu. A broader representation of professional skills including physiotherapy, speech therapy, prosthetics and orthotics and podiatry is needed to meet the range of needs of people presenting to the health facilities for services.

13.8 Perspective of people with a disability

Ratifying the Convention on the Rights of Persons with Disabilities is the first and most vital step towards addressing their rights and needs, including for rehabilitation services. Fusi Alofa Association has also been advocating for the establishment of a Prosthetics & Orthotics service for the growing number of amputees from diabetes. Feedback from the government has been that such a program is too expensive.

Table 11. Rehabilitation Health Workforce - Tuvalu

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Specialist medical practitioners	2212	Surgeon	1	0.09	Fiji School of Medicine	Government	Diagnosis and medical care
		Paediatrician	1	0.09	Fiji School of Medicine	Government	Diagnosis and medical care
		Anaesthetist	1	0.09	Fiji School of Medicine	Government	Diagnosis and medical care
		Obstetrics and Gynaecology Specialist	1	0.09	Fiji School of Medicine	Government	Diagnosis and medical care
Physiotherapists	2264	Physiotherapist (Generalist-provides orthopaedic, paediatric and neurological physiotherapy).	1	0.09	Fiji School of Medicine	Government – National Hospital	Rehabilitation in the hospital setting: mobilising, gait facilitation, neuro facilitation, prescribing walking aids. Also conducts home visits and sets up home exercise program for patients.

* (as nominated by key informants in returned PRHW Template)

14. Country Profile: Vanuatu

14.1 Country Information¹

Vanuatu has a principally rural based population (approx 75%) though migration rates from rural areas to the urban areas of Port Vila and Luganville are high. The total population was estimated to be 251,784 in 2011.² Most people earn a living from subsistence farming and the economy is supported by foreign aid for investment from donor countries including Australia, China and New Zealand. The country has a republican political system with an elected president and is divided into two districts – Northern and Southern which are then divided into six provinces - four in the Northern District and two in the Southern.

Demographic Indicators: ³

- Land area: 12,281 km²
- Population density (2010): 20/km²
- GDP (2007): USD 2,218
- Life expectancy: Males: 65.6 Females: 69.0
- Infant mortality rate: 25/1000 live births

14.2 Health⁴

Health services in Vanuatu are provided through the Ministry of Health (MOH). The system has five private hospitals, two of which are tertiary referral hospitals – one in the capital Port Vila and the other in Luganville. There is also a network of 27 health centres (approximately four in each district) staffed by a nurse practitioner and 97 dispensaries which are staffed by a general nurse and every island has at least one. There are also community funded aid posts in most villages (approx 231) and the MOH provides some medicine and training for the village health workers based at these posts. In 2008 there were 26 physicians, 332 nurses, 48 midwives, and 212 community health workers.

¹ Unless otherwise indicated all country information sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

² Secretariat of the Pacific Community. (2011). *Pacific Island populations: Estimates and projections of demographic indicators for selected years*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=104&Itemid=42&lang=en&limitstart=5

³ Secretariat of the Pacific Community. (2010). *2010 Pocket statistical summary (GDP's etc)*. Accessed at http://www.spc.int/sdp/index.php?option=com_docman&task=cat_view&gid=105&Itemid=42&lang=en&limitstart=5

⁴ Unless otherwise indicated all health information sourced from World Health Organization. (2011). *Western Pacific Country Health Information Profiles: 2011 Revision*. Accessed at: <http://hiip.wpro.who.int/hiip/chips>

Health issues of most significance in Vanuatu are communicable disease prevention and control, in particular malaria. These account for most of the leading causes of inpatient hospital stays. There is a trend towards non-communicable diseases becoming the leading causes of mortality, particularly as life expectancy increases and the chronic diseases associated with ageing become more prevalent in the community.

14.3 Disability⁵

Vanuatu has signed and ratified the Convention on the Rights of Persons with a Disability. The focal point for disability affairs within the government is the National Disability Committee. This was established in 2006 and sits within the Ministry of Justice and Social Welfare. It is coordinated by the Disability Desk Officer who reports to the Ministry's Director of Women's Affairs. The government have developed a *National Disability Policy and Plan of Action 2008-2015* and an *Inclusive Education Policy and Strategic Plan of Action 2010-2020*.⁶ There are no official statistics on disability in Vanuatu.

14.4 Workforce Data Summary

The PRHW Template was returned by the government key informant who completed it in consultation with the Ministry of Health and the service provider key informants in this study. The government key informant and two service provider key informants attended the interview at the Pacific CBR Forum however the DPO key informant was unable to be present.

The Ministry of Health employs three Ni-Vanuatu physiotherapists all of whom graduated from the Diploma course at the Fiji School of Medicine (FSM) and are based at the Vila Central Hospital (VCH) in Port Vila. There is also one other FSM graduate physiotherapist who works privately. The feasibility study by Motivation Australia noted that one physiotherapist is currently completing the Diploma to Degree bridging course leaving only two physiotherapists providing services in Vanuatu. This report also noted one physiotherapy aide based at the other tertiary hospital *Northern District Hospital (NDH)* in Luganville who has received no formal training but is currently being supported by an international volunteer physiotherapist.⁷

⁵ Unless otherwise indicated all information sourced from United Nations Economic and Social Commission for Asia and the Pacific (2010). *Disability at a glance 2010: a profile of 36 countries and areas in Asia and the Pacific*. Accessed at: <http://www.unescap.org/publications/detail.asp?id=1407>

⁶ Motivation Australia, Australian Swiss Embassy, Australian Red Cross and International Society of Prosthetics and Orthotics. (2012). *Feasibility study report: Vanuatu. The provision of wheelchairs, supportive seating and prosthetics and orthotics in Vanuatu*.

⁷ Motivation Australia, Australian Swiss Embassy, Australian Red Cross and International Society of Prosthetics and Orthotics. (2012). *Feasibility study report: Vanuatu. The provision of wheelchairs, supportive seating and prosthetics and orthotics in Vanuatu*. (p10)

There is one paediatrician based at VCH in Port Vila whose focus is on acutely unwell children in the paediatric ward. There are surgical and Ear Nose & Throat specialists at the hospital who provide services to some clients with disability. The Vanuatu Society for People with Disability (VSDP) is the only NGO registered for providing services, including an early intervention program, to people with disability in Vanuatu. This NGO is based in Port Vila and provide services to people in the immediate area. They employ two staff members who have completed the Community Rehabilitation Assistant (CRA) course at the Fiji School of Medicine. There are also three volunteers who have learnt on the job skills with some training from visiting international therapists.

The Sanma Frangipani Association (SFA) which is based in Luganville also provides services to people with a disability, particularly for children, and uses what resources it can to reach outer communities in Vanuatu. This association operates with a separate board of management but is linked to VSDP. The services are provided principally by SFA's founder (one of the key informants) who has no formal qualification but is the mother of a child with a disability who draws on her own experience and informal training she has received from visiting therapists and professionals. There is one Prosthetic Technician in Vanuatu who is based in Port Vila and according to the Motivation Australia feasibility study is close to retirement⁸. Key informants also reported there is currently one speech therapist international volunteer in the country who is based with the NGO.

14.4 Links with Health System

To access the services from the physiotherapists a referral must come from the village health worker to the health centres then on to the hospitals. This may happen in cases where acute medical attention is required such as severe strokes, injuries, or septic wounds related to diabetes.

In the Port Vila area when the patient is ready for discharge hospital staff typically the physiotherapist will contact VSPD for assistive devices. VSPD have a limited range of donated walking aids and wheelchairs and are able to provide some assistance and advice to the family on how to assist the person once they return home. However there is limited coordinated support and the community services offered by VSPD do not reach all people who could benefit.

There is a maternal and child health care program based at VCH which provides developmental assessments however these services are dependent on mothers attending the appointments at the hospital. The maternal and child health nurses run community programs; these services are not regular and do not cover all villages, particularly in the outer islands. The services include development assessments. The nurses refer to the appropriate services at the hospital such as physiotherapy or surgical units however these services are only available for inpatients and offer

⁸ Motivation Australia, Australian Swiss Embassy, Australian Red Cross and International Society of Prosthetics and Orthotics. (2012). *Feasibility study report: Vanuatu. The provision of wheelchairs, supportive seating and prosthetics and orthotics in Vanuatu.*

no follow up on discharge back to the community. The early intervention service run by VSDP in Port Vila receive most of their referrals directly from parents who have heard through word of mouth and awareness raising programs on radio and newspapers. More recently community nurses have started to also refer children.

On the outer islands, when a client becomes known to SFA the workers will visit and provide assessment and what basic equipment and disability awareness education they can. The service provider at SFA has developed a good working relationship with the general surgeon and can refer for medical advice and in turn often receives referrals for follow up support in the community. SFA have also developed networks with the nurses in the community health centres and dispensaries. Generally these nurses are keen to learn more about how to help people with disability and will refer clients to SFA.

There are limited services available for people with mental illness in Vanuatu and no psychiatrist. There have been some recent developments in this area with consultations with WHO and the establishment of a Mental Health Committee. The activities under this program are principally focussing on community awareness and encouraging participation in sport. There is one clinical psychologist from Australia working with this project as a volunteer.

Access to the rehabilitation services in Vanuatu was described as often being dependent on 'luck'; heavily based on word of mouth and awareness amongst other community members and health workers. The services are concentrated on the two urban areas and have limited coverage into the outer islands and villages. Most of the workers providing the services do not have formal qualifications with the exception of the three physiotherapists, the two CRA's, and the specialist medical staff at the hospital.

14.5 Issues identified by health workforce

The established informal working relationships with the hospital medical and nursing staff is a strength of the current services. There have also been good outcomes from the awareness raising activities conducted by VSDP and SFA with increased referrals including from other health professionals. This in turn however creates challenges in meeting increased demand.

The urban focused services face significant challenges to extending the reach of their services. The cost of travelling to outer islands is the main restricting factor. Key informants described using networks of friends, family and other NGO's such as the Red Cross to assist with rides and shipping equipment to outer islands and rural areas. Another significant challenge is the lack of access to formalized training for rehabilitation workers in Vanuatu. Currently they are dependent on training from visiting professionals, on the job training, or travel to other countries such as Fiji to complete a formal training course and obtain a qualification.

14.6 Rehabilitation workforce needs

The impairments identified as most frequently seen were stroke, cerebral palsy and intellectual disability. Amputations due to diabetes were also identified as a growing issue especially in the

urban areas.⁹ The need for more local people who are trained in rehabilitation skills resulted in a suggestion for school leavers are given an opportunity to complete the CRA course in Fiji. The SFA Co-ordinator has been working with the Vanuatu Nursing College to include information on disability in the nursing curriculum.

The future focus and therefore appropriate skills needs to be on early intervention to prevent and minimise the impact of disability and improving access to appropriate equipment and accessible environments.

14.7 Perspective of people with a disability

The DPO key informant from Vanuatu was not able to attend the interview however their views were represented in the workshop material.

⁹ The Motivation Australia feasibility study notes that the surgeon at the hospital estimated there are approximately 60-70 new lower limb amputees due diabetes each year Motivation Australia, Australian Swiss Embassy, Australian Red Cross and International Society of Prosthetics and Orthotics. (2012). *Feasibility study report: Vanuatu. The provision of wheelchairs, supportive seating and prosthetics and orthotics in Vanuatu.*(p11).

Table 12. Rehabilitation Health Workforce - Vanuatu

Occupational Category	ISCO Code	Title*	Number	Ratio per 1000 pop.	Training	Employer	Rehabilitation Services Provided
Specialist medical practitioners	2212	Paediatrician	2	0.008	University of Papua New Guinea & Fiji School of Medicine	Government	Diagnosis, assessment and treatment
Physiotherapists	2264	Physiotherapist	4	0.016	Fiji School of Medicine	Government (3) & Private (1)	Assessment, treatment and referral
Audiologists and speech pathologists	2266	Speech therapist	1	0.002	Overseas (Australia)	NGO – International volunteer (Australia)	Work with children and parents
Medical and dental prosthetic technicians	3214	Prosthetic technician	1	0.002	Fiji School of Medicine	Government	Assessment and development of appropriate equipment. Conducts training.
Physiotherapy technicians and assistants	3255	Local massage specialist	NK	N/A	Passed on through traditional knowledge and skills	Private	...
Community-Based Rehabilitation Worker	Not included in ISCO	CBR Worker	5	0.02	Fiji School of Medicine (2)/Trained locally on the job (3)	NGO – Vanuatu Society for Disabled People (VSPD). 2 employed and 3 work as volunteers	Identify & detect disability and provide proper intervention. Also make referrals to appropriate section in hospital for medical treatment based on client's need.

* (as nominated by key informants in returned PRHW Template)