2011 Progress Report on the PIHOA Nahlap Resolution & Action Plan for Human Resources for Health dated August 2006

Pacific Island Health Officers Association

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Abstract:
Human Resources for Health Crisis in the U.S-Associated Pacific islands.

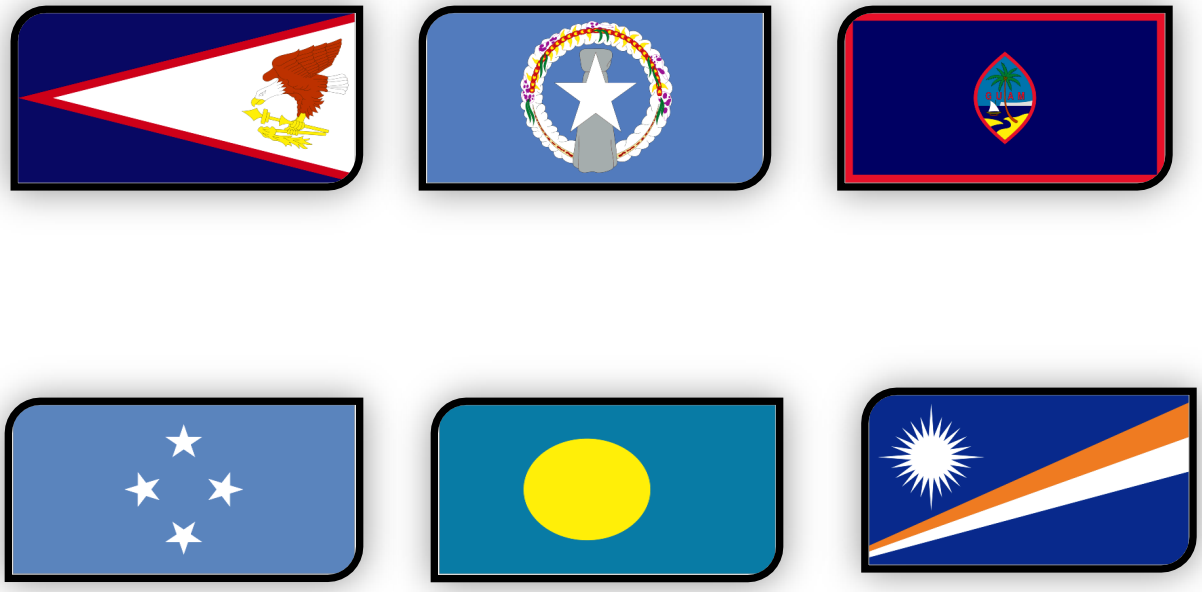
In 2006, the WHO published its World Health Report, *Working Together for Health*[1] and announced that through 2015 it would focus on the growing global crisis affecting the health workforce of its member nations. This crisis is characterized by absolute and chronic shortages of health workers, an imbalanced mix and distribution of skills, worker out-migration, adverse working conditions, low salaries, poor benefits, a weak knowledge base and under-training.

Similar health workforce challenges exist among the six jurisdictions of the U.S.-Affiliated Pacific Islands (USAPI). The USAPI suffer from absolute shortages of select health workers - especially among nursing, physician specialists, and allied health and community health workers - and demonstrate a weak science base and under-training among the current health workforce. The problems are amplified by weaknesses in the regional educational pipeline (K-12) with teacher workforce shortages, lack of adequate teacher training and certification, particularly in mathematics and science.

On behalf of the Ministers, Secretaries, and Directors of Health of the USAPI, who constitute the board of directors of the Pacific Island Health Officers Association (PIHOA), PIHOA partnered with the WHO to better define the health workforce crisis in its region and to find practical and timely solutions. To this end, the PIHOA Board met in 2006 on Nahlap Island, Pohnpei State, Federated States of Micronesia, and developed *the Nahlap Human Resources for Health Action Plan*[2] . This plan provided an initial framework to address the health workforce crisis in the region—an area that spans five time zones and includes American Samoa, Guam, the Commonwealth of Northern Mariana Islands, the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia (Chuuk, Yap, Kosrae and Pohnpei States).

Using funds from PIHOA member dues and the WHO Pacific HRH Alliance, PIHOA committed itself to assisting each of its member states with developing Strategic HRH Plans. These plans served as the foundational documents for a WHO / PIHOA Regional Human Resources for Health Planning Meeting, on October 28th through 30th, 2009 on Guam. The PIHOA Board and select regional institutions of higher learning, and regional health associations met to share information and plan next steps to address the HRH crisis.

At the meeting, PIHOA presented a meta-analysis of five of the six HRH Country Plans (the HRH Plan in American Samoa deferred because of the 2009 tsunami) as well as country HRH updates by the Chief Executives in health. Similar presentations were made by the academic community and regional health associations. The major outcomes included a commitment to foster the political will necessary to develop, implement, and financially support HRH Offices in each of the jurisdiction, as soon as possible. Also identified was the need to provide timely and practical training to jurisdiction HRH Officers. Once up and functioning, the HRH Offices and Officers would be in a stronger position address the challenges and solutions outlined in their respective HRH Plans and the Regional Strategic HRH Plan outlined below. In May 2010 PIHOA passed an overarching resolution establishing "Regional State of Health Emergency Declared Due to Epidemic of Non-Communicable Diseases In the United States Affiliated Pacific Islands"[3]. NCDs rates in the USAPI are some of the highest in the world and are in epidemic proportions. Now all PIHOA priorities, including HRH, will begin to focus on reducing NCDs – the leading cause of death and suffering in the region.



Section 1: Executive Summary

In 2006, the WHO published its annual report on the world's health workforce, *Working Together for Health*[1], and announced that through 2015, it would focus on the growing global crisis affecting the health workforce of member nations. This crisis is characterized by absolute and chronic shortages, imbalances of skills mix and distribution, outmigration, adverse working conditions, low salaries, poor benefits, a weak knowledge base and under-training. Similar health workforce challenges exist among the six United States-Affiliated Pacific Islands, including absolute shortages of select health workers, including nurses, allied health workers, and community health workers; a weak science base; and under-training. In the USAPI, these problems are exacerbated by weaknesses in the K through 12 educational pipelines, which faces its own workforce challenges, including teacher shortages and a lack of teacher training and certification, particularly in mathematics and science.

The following report describes the status and outcomes of a regional commitment made by the Pacific Islands Health Officers Association, in August of 2006, to find practical and timely solutions to these problems and strengthen the health workforce among its six member states. The commitment—documented in PIHOA Resolution 42-06—was developed during a workshop at the 42nd PIHOA Meeting, on Nahlap Island, Pohnpei State, Federated States of Micronesia, with assistance from the WHO South Pacific Office. It largely adopts the framework established by the WHO in *Working Together for Health.*[1]

The United States Affiliated Pacific Islands (USAPI) includes:

- The Republic of the Marshall Islands
- The Federated States of Micronesia, including Kosrae, Pohnpei, Chuuk and Yap States
- The Republic of Palau
- The Commonwealth of Northern Mariana Islands
- Guam
- American Samoa

The Pacific Island Health Officers Association (PIHOA) is a non-profit organization led by the Ministers, Secretaries, and Directors of Health of the USAPI. PIHOA's mission is to improve the health and well-being of USAPI communities by providing, through consensus, a unified credible voice on health issues of regional significance. The USAPI are populated by more than 500,000 people who live on hundreds of

islands and atolls spanning millions of square miles of ocean and crossing five Pacific time zones.

The Nahlap Resolution[2] committed PIHOA to developing "a strategic HRH report to address regional HRH challenges and focus on critical issues," including strengthening and developing:

- The educational pipeline for the new workforce (K-12),
- Career ladder and bridging training for the current workforce,
- Health management training,
- Overall HRH planning, and
- Partnerships with local institutions for higher learning for delivery of needed accredited curricula.

A spate of HRH-related PIHOA resolutions followed the Nahlap Resolution and includes:

- PIHOA Resolution #43-5, "Concerning the Further Development of the Nahlap Action Plan for Human Resources for Health," encouraging PIHOA member states to identify HRH focal points and committing PIHOA member states to a regional planning process for HRH. The HRH focal points are now the primary focus of PIHOA's new strategic direction for HRH, described below. A regional planning meeting was not held until October 2009, since PIHOA members directed that local plans be completed first.

- PIHOA Resolution #43-6 "Supporting the Redefinition of the PIHOA Priority Area for Licensure to include Quality Assurance and Improvement," which resulted in PIHOA's Regional Quality Assurance Initiative. This initiative is ongoing and has resulted in a web-based QA resource inventory, seven QA site assessments, six sites establishing full-time QA positions, four sites establishing QA committees, and several pilot projects focused on QA development. Effective QA is part of HRH development, since it is central to improving the working environment of USAPI health professionals.

- PIHOA Resolution #43-7 "Supporting the Development of Appropriate Professional Licensure in Member Jurisdictions," which is a continuation of a previous resolution resulting in PIHOA-sponsored assessments of licensure systems in RMI and FSM and a regional report on health professional licensure, completed through the Pacific Basin Medical Association.

- PIHOA Resolution #43-14, "Recognizing the Need to Establish a Regional Dental Para-Professional Training Program and On-site Workforce Training," which resulted in a PIHOA-sponsored business plan for a regional training program. The plan was developed by a committee chaired by the Pacific Basin Dental Association and was modified and translated into a HRSA grant application submitted, with PIHOA's assistance, on March 2010.

- PIHOA Resolution #43-15, "Establishing the Support of PIHOA for a Nurse Training Program in the Federated States of Micronesia," which resulted in a PIHOA-sponsored nurse consultancy to the College of Micronesia-FSM to assist with the develop of the curriculum and its submission to the Western Association of Schools and Colleges. The curriculum was approved in May 2009. PIHOA recently assisted with securing funding for the programs implementation, through a HRSA Area Health Education Center (AHEC) grant.

- PIHOA Resolution #43-16, "Supporting Undergraduate Public Health Training among the Freely Associated States" which resulted in the establishment of the Associate of Sciences Degree in Public Health (ASDPH) program at the College of Micronesia FSM. A modified version of the program is now being established at Palau Community College, with other community colleges in the Marshall Islands, the Commonwealth of the Northern Mariana Islands, and American Samoa expressing interest. ASDPH graduates will then have the opportunity to matriculate by distance to a Bachelors in Public Health being developed with San Diego State University School of Public Health This is truly developing into a flag-ship program, with broad ramifications for both the local workforce and donor agencies interested in a more sustainable approach to education and training.

  PIHOA Resolution #43-07, "Concerning HRH Plan Development," which committed PIHOA member states to developing local HRH plans. Nine of the ten plans have been complete, using technical assistance and funds secured by PIHOA. The plans are summarized in this report and are the foundational documents for the regional planning meeting held in October 2009.

- PIHOA Resolution #44-01, "Establishing Public Health Planning as a Priority Area for PIHOA," which resulted in PIHOA securing funds from the CDC to underwrite the development and delivery of a training curriculum for health agency management in how to undertake effective public health planning. A

planning and curriculum meeting for this project took place in Palau in the spring of 2010.

Other key benchmarks for progress made toward the Nahlap Resolution include:

- June 2008: PIHOA HRH Committee formed.
- September 2008: PIHOA HRH Committee publishes white paper entitled "Human Resources for Health Challenges among the Freely-Associated States of Micronesia,"[4] which became an early road-map for HRH in the FAS and was presented at the U.S. Department of Interior sponsored meeting *Future of Health Care in the Insular Areas - Leaders Summit* in September 2008
- November 2008: Regional planning group co-convened by PIHOA and the University of Guam, and underwritten by PIHOA, for the purpose of developing the first Micronesian-Based Area Health Education Center program. AHEC grant address health workforce disparities and promote the diversity and quality of the workforce in health professions shortage areas.
- April 2009: Full-time PIHOA Regional Coordinator for HRH recruited and hired.
- June 2009: First Guam/Micronesian AHEC awarded, to a consortium of the University of Guam, College of the Marshall Islands, the College of Micronesia-FSM, and Guam Community College, with help from the University of Hawaii AHEC and PIHOA. This assurance of constant AHEC funding enabled the new Nursing and Public Health Training Programs at COM-FSM to be both accredited in 2009.
- July 2009: The 11th Micronesian Chief Executive Summit directed its Health Committee Secretariat (PIHOA) to begin discussions with the Fiji School of Medicine to develop Allied Health training programs "up north" in the Freely Associated States.,
- October 2009: PIHOA Regional HRH Planning Meeting convened in Guam, which brought together for the first time USAPI health ministries, community colleges and other health associations, for joint HRH planning.
- March 2010: Stable, long-term funding secured from US HHS for the PIHOA Regional HRH Coordinator position.
- May 2010: PIHOA Resolution declared a regional state of emergency due to an epidemic of non-communicable diseases and is addressing its HRH implications[3].
- May 2010: With CDC funding a Strategic Public Health Planning Workshop was convened to support public health planning throughout the region.
- July 2010: PIHOA formally started discussions with San Diego State University School of Public Health to provide undergraduate and postgraduate public health training in the USAPI.

- August 2010: Before the 49th PIHOA meeting a one day Workshop on Public Health Education in the Pacific was hosted by the University of Hawaii Manoa Department of Public health Sciences and convened representatives from the San Diego State University School of Public Health, Fiji School of Medicine Department of Public Health, Hawaii Pacific University Health Sciences Department, University of Guam, and University of Hawaii Manoa to provide technical assistance to the University of Guam which was developing undergraduate Public Health tracks and discuss future of public health training in the Pacific.
- September 2010: PIHOA joined the UH Department of Public Health Sciences in becoming a partner in the UC Berkeley School Public Health HRSA-funded CAL-PAC Training Center to fund a full time Public Health Training and Curriculum Development Coordinator for the USAPI.
- October 2010: PIHOA started coordinating CDC Public Health Infrastructure Grant Component II and its HRH implications for region.
- November 2011: PIHOA funded one representative each of a U.S. Flag Territory and FAS jurisdiction to evaluate a WHO Pacific HRH Alliance HRH 101 pilot course in Majuro, RMI.
- November 2010: Captured a National Library of Medicine Southwest Region-UCLA grant to fund 8 medical librarians to attend the 20th Pacific Island Association of Libraries, Archives, and Museums Conference in Chuuk, FSM.
- February 2011: PIHOA began preliminary discussions with the Fiji School of Medicine on feasibility of establishing Dental Therapist Training Program and other Allied Health training programs in Micronesia.

Over the four years since the Nahlap Resolution 42-06, it has become evident that PIHOA membership approach HRH development from a particular set of assumptions. These assumptions are informal and not strictly adhered to, but they resurface with sufficient frequency to warrant a general description:

- Donor and technical agencies should build, rather than bypass, local educational capacity. More resources should be shifted *toward* developing sustainable educational platforms at USAPI community colleges, and *away* from episodic and short-term "band aid" training.
- When practical, training and education should be tied to degree- and credit-granting programs. These in turn should be linked to civil service systems of career advancement and pay. Otherwise, health systems create a class of often demoralized workers (one health leader called them "public health slaves") who get increased training, increased responsibility, and no salary or career incentives.

- When feasible, health professional education should be delivered in the context of the health system, or at least in-country, to increase access, foster a culture of learning in the workplace, and limit worker migration.
- Health systems should be better stewards of the health workforce, by developing strong quality assurance and improvement programs, which help retain and maximize the value of health worker education and training.

The PIHOA Regional Planning Meeting for HRH, October 2010

Meeting Objectives and Format

In 2007, PIHOA pooled its own funds with resources from the WHO's Pacific HRH Alliance to help ten USAPI sites develop local strategic HRH action plans. These plans created the foundation for a Regional HRH Planning Meeting in Guam, October 28th through 30th, 2010. The meeting was hosted by the University of Guam and the Guam Department of Health and Social Services and underwritten by PIHOA using funds provided by the US Department of Interior and the World Health Organization.

The purpose of the Regional HRH Planning Meeting was to:

1. Identify and, to the extent feasible, address barriers to developing, updating, implementing and evaluating local HRH.
2. Identify and prioritize the regional support necessary for assisting local jurisdictions with successfully developing, updating, implementing and evaluating local HRH plans; to the extent feasible, document commitments among participating partners.

Three groups were invited to participate: 1) Chief executives in health from the USAPI, including directors, ministers, secretaries and senior subordinates; 2) PIHOA affiliate members, consisting of other health-related USAPI associations, and 3) USAPI university and community college executives and staff.

The outcomes of the meeting were intended to help guide HRH development in the region;
assist PIHOA and its member states to negotiate with donor and technical assistance agencies; and provide an HRH road map for partners over the next two years.

Organizers analyzed and drafted a variety of documents to support the meeting, including nine of the ten local HRH strategic plans, in draft or final form, and a meta-analysis of local HRH strategic plans, which was designed to identify cross-cutting

issues and summarize work to date. American Samoa's planning process was deferred because of the tsunami. The meta-analysis was emailed to participants in advance of the meeting.

The meeting included presentations and participant Q&A addressing:

- Relevant background and developments in global and regional HRH
- An overview of PIHOA HRH activities
- An HRH status report from each PIHOA member states
- A meta-analysis of regional HRH reports and the nine local HRH strategic plans.

After the presentations, participants broke into small groups of one each for chief health executives, PIHOA affiliate members, community colleges, and HRH focal points from PIHOA member states. Each group was provided guiding questions, developed their recommendations, and then reported out to the large group.

By mid-day of the third day, most of the meeting goals had been met. The final summary session on the afternoon of the third day was marred by a bomb threat at the hotel meeting site. At the direction of the Office of the Governor of Guam, the meeting was adjourned prematurely so that participants staying at the conference hotel could be moved out by 5:00 PM.

Meeting Outcomes

In their respective breakout groups, the chief executives and the HRH focal points converged on a common issue: Ministries and department are ill-equipped to manage the challenges of HRH development. After HRH plans are developed, usually by external consultants, these plans get divided up locally and handed off to various staff already burdened with other full-time responsibilities. Often, these individuals get limited support, no training, a murky mandate, few if any incentives, and little time to the do the job well.

But HRH development is not something agency staff can do in their spare time. It is core to the mission of a health agency and requires time, focus, a leadership mandate and a special mix of management-level skills, including planning, coordination, communications, data use, and project management, among others. These skills are distinct from those generally associated with traditional human resource departments, which tend to focus more narrowly on recruitment, hiring, payroll and benefits.

One senior health leader remarked how the health sector "feels the pain" of health workforce shortages and under-training more immediately and more acutely than any other sector, including education. The irony here is that these same agencies, which have the greatest incentive to build their workforce, end up delegating strategic HRH development to the other sectors almost entirely.

The answer, as proposed by the health ministers, is to develop within the ministries and departments of health deep capacity in HRH development, by creating departmental "HRH units" staffed by one or more individuals designated, trained, professionally networked, and paid to serve as the day-to-day stewards of HRH development for that agency. This individual would manage the implementation of the agency HRH plan, network with the educational sector, including community colleges and elementary and secondary schools, assess workforce needs, and serve as the advocate for the *urgency* health agencies bring to the cross-sectorial challenge of workforce development. This individual would provide the traction for health workforce development that donor and technical assistance agencies often complain is missing locally.

So the two major—and arguably groundbreaking—recommendations of the chief executives and HRH focal points were the following:

- Develop and strengthen the political will to plan, implement, and financially support HRH Offices in each of the jurisdictions, as soon as possible.
- Provide timely and practical training and on-going technical assistance to jurisdiction HRH Officers.

This second recommendation assumes that the skill set, qualifications, education, and seniority of HRH officers must be clearly and uniquely defined and that HRH officers must be recognized and supported, both within an agency (with appropriate remuneration and career laddering) and as a professional group (requiring formal programs for training and education and regional opportunities for peer mentoring and networking).

The breakout groups also recommended that health agencies, supported by appropriate partners:

- Strengthen government Personnel Management Systems, both within health agencies and within the broader government civil service systems; among other things, advocate for formally linking employment to knowledge and academic qualifications.

- Review personnel policies and procedures to address low salaries, equitable and just compensation rates, and flexible strategies (i.e. work release time), in order to create incentives for health workers to attend formal training program and upgrade skills.
- Make practical hands-on "HRH 101" training available to health agencies as soon as possible, along with a package of ongoing technical assistance to strengthen the ability of HRH officers to do their job effectively, including relevant training in health-specific workforce issues and general personnel system requirements.
- Encourage the education sector to develop a Regional Strategic HRH Educational and Resources Plan, which will identify and implement needed health careers training programs,
- Advocate for scholarship reform, including supporting on-island health careers training and creating a pay-back employment requirement for scholarship recipients,
- Develop and strengthen foundation training programs among the regional colleges and community colleges, in nursing, public health, health services management, and allied health. This must include providing financial resources to assist with recruiting students and providing adjunct faculty, mentors and preceptors.
- Support the coordination of HRH development across agencies and sectors; for example, support Guam as it develops a non-governmental organization for HRH development and coordination.

These recommendations are a distillation of the many insights and substantial advice articulated by breakout groups and discussed in more detail below.

However, it was clear that unless the two primary recommendations of the Chief Executives are quickly implemented, and a local and regional HRH staffing framework is developed and funded soon, it will be difficult to address all other HRH recommendations and move the HRH agenda forward. Now that PIHOA has declared a non-communicable disease state emergency in the region[3], all of PIHOA's priority areas, including HRH, will be focused to decrease the leading causes of death and suffering in the region – NCDs.

Section 2: Global and Local Challenges in Human Resources for Health

"It is people, not just vaccines and medicines, who prevent disease and deliver curative health services."[1]

I. Overview

The World Health Organization defines health workers as "all people engaged in actions whose primary intent is to enhance health."[5] This definition is inclusive. Besides the physicians, nurses, and allied health workers typically identified as the health workforce, this definition also includes family care givers, patient-provider partners, part-time workers (especially women), indigenous healers, health volunteers and community workers, and even maintenance and support staff essential to the effective operations of a health system.

The health workforce is the key link between *knowledge* and *action*. Good health care depends upon having the right people, with the right mix of training and skills, in the right place, in the right numbers, at the right time, working together to enhance health.

In 2003, before taking his position as the Director-General for the World Health Organization, the late Dr. Lee Jong-wook asked health leaders what they saw as the most critical health issues facing their countries. They spoke of a common theme: Human resources for health was in crisis. The health workforce suffered from adverse working conditions, low salaries, absolute shortages, imbalances of distribution and skills mix, a weak knowledge base (especially in math and science), and shortages caused by the migration of health workers from areas of need to more lucrative settings. The issue was so important that the WHO dedicated its annual *World Health Report* in 2006 to human resources for health. Entitled "Working Together for Health",[1] the report includes a preface by Dr. Lee, who clearly summarized the problem:

> *There is a chronic shortage of well-trained health workers. The shortage is global, but most acutely felt in the countries that need them the most. For a variety of reasons, such as the migration, illness or death of health workers, countries are unable to educate and sustain the health workforce that would improve people's chances of survival and their well-being…*
>
> *The solution is not straightforward, and there is no consensus on how to proceed. Redressing the shortages in each individual country involves a chain of cooperation and shared intent between public and private sector parties which fund and direct educational establishments; between those who plan and*

influence health service staffing; and between those able to make financial commitments to sustain or support the conditions of service of health workers.[1]

The six United States-Associated Pacific Islands (USAPI) also experience this "chronic shortage of well-trained health workers", but in crisis proportions.

The USAPI are home to more than 500,000 people who live on hundreds of islands and atolls, spanning millions of square miles of ocean and crossing five Pacific time zones. They include the three U.S. Flag Territories of Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa, and the three Freely Associated States (FAS) of the Republic of the Marshall Islands, the Republic of Palau, and the Federated States of Micronesia (Pohnpei, Kosrae, Chuuk, and Yap). The FAS are independent nations in a special compact relationship with the United States.

In 2006, the Pacific Island Health Officers Association (PIHOA) responded to the WHO's global HRH initiative[1] by convening its own workshop on human resources for health, entitled "Working Together for Health: How can we help ourselves?" Assisted by the South Pacific Office of the WHO, the Ministers, Secretaries, and Directors of Health of the USAPI gathered on Nahlap Island, Pohnpei State, FSM to understand and respond to the health workforce crisis. They identified two major regional challenges:

1. An absolute shortage of select categories of health care workers, including a chronic and discouraging lack of nurses
2. An undertrained health workforce that often lack formal, accredited training in their respective disciplines

Contributing to these two challenges is a weak educational pipeline. Students passing through elementary and secondary schools in the USAPI chronically underperform in math and science and typically do not qualify for science-based health career training programs in or outside of Micronesia. In its *Nahlap HRH Action Plan*[2], PIHOA committed to developing "a strategic HRH report to address regional HRH challenges and focus on critical issues," including strengthening and developing:

1. the educational pipeline for the new workforce (K-12),
2. career ladder and bridging training for the current workforce,
3. health management training,
4. overall HRH planning, and
5. partnerships with local institutions for higher learning for delivery of needed accredited curricula.

Since then, and in the spirit of the *Nahlap HRH Action Plan*, PIHOA passed a number of formal HRH resolutions, including:

- Identifying and selecting HRH Focal Points,
- Working with WHO and other stakeholders to promote HRH development in the Pacific,
- Developing and strengthening licensure and continuing professional development for the current health workforce,
- Supporting the development of new regional health professions training programs, including those for nursing, oral health, public health, and
- Endorsing the efforts of the Fiji School of Medicine in working with WHO to promote HRH planning activities in the region.

To drive these resolutions PIHOA established an HRH Committee. In September 2008, the Committee published a white paper entitled "Human Resources for Health Challenges among the Freely Associated States of Micronesia," which has become an early road map for HRH development in the region.[4]

Recent Data on the USAPI Health Workforce – The most current inventory of health workers throughout the region was performed by the Pacific Association for Clinical Training in 2004-5 (**Table 1**)[6]. This inventory was compiled from survey of HRH officers and other key informants in the region showing a total regional health workforce of approximately 3000. Note that there is a substantial disparity among the jurisdictions in the population to health worker ratios for various categories of health worker (**Figure 1**).[7]

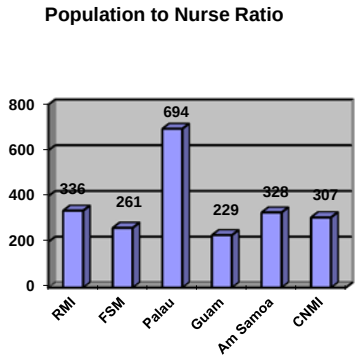
Another inventory of health workers in the Pacific was recently performed for the WHO's Pacific Human Resources for Health Alliance by the University of New South Wales.[8] This inventory does not include the CNMI, Guam or American Samoa. For the jurisdictions that were surveyed, the authors noted serious limitations on existing data sources including:

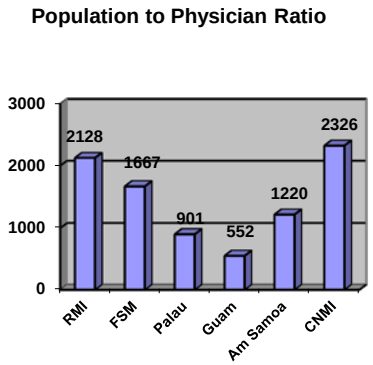
- Unavailability of important components of HRH data in some jurisdictions, including a lack of disaggregated data (i.e. breakdown of data by age, gender, formal vs. informal education and other criteria useful for HRH planning) for most jurisdictions.
- Lack of common definitions and methodology for HRH data collection across the region

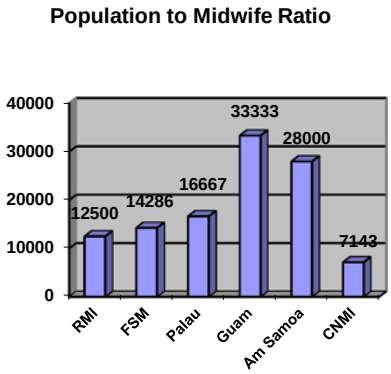
Table 1: *The Health Care Workforce in PIHOA Jurisdictions (from Palafox, et.al., 2005)*[6]

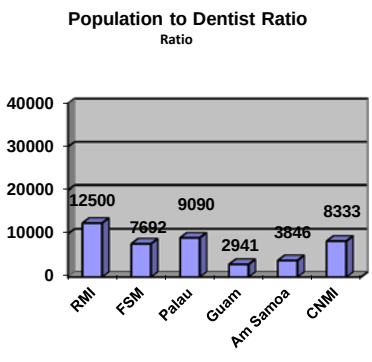
Jurisdiction	Physicians	Nurses (RN, LPN, CNA or Graduate nurses, practical nurses)	Nurse mid-wives	Dentists	Dental Asst, nurses, techs	Extenders (Health Assts, Medex comm. health worker)	Lab	Pharmacy	Radiology Techs	Other
Am. Samoa	47	175	0	15	22	30	28	12	13	32
CNMI	30	226	10	8	9	0	7	8	2	14
Guam	280	676	5	53	187	10	28	8	18	12
Chuuk	20	175	4	5	10	97	10	5	6	7
Kosrae	8	35	4	3	1	33	6	2	2	3
Pohnpei	17	83	5	3	16	31	7	5	5	2
Yap	12	39	4	1	7	27	6	5	4	4
RMI – Ebeye	11	27	0	1	3	10	4	2	4	2
RMI-Majuro	21	150	11	4	4	5	13	4	6	8
Palau	25	110	0	4	10	0	11	9	7	56

Figure 1: *Population to health care worker ratios, PIHOA jurisdictions (Sources: Pacific Association for Clinical Training as above and WHO, The World Health Report, 2006*[7]*)*









The authors also noted limitations in HRH building capacity throughout much of the region, including

- Weak organizational support for data collection systems and limited capacity for data management/ use of data to guide policy making at the national level
- Fragmentation of responsibility for HRH policy-making in some countries
- Limited coordination among external partners supporting HRH development
- Inadequate collaboration among local and national stakeholders (e.g. Ministries of Health, Ministries of Education, Public Services Commissions, Finance Departments)
- Limited continuing education and training activities

The author's key recommendations for WHO's Pacific HRH Alliance include:

- To provide support to countries for development of standards, systems for collection of data, and central national HRH databases for use in HRH planning
- To work with external partners to increase the availability of continuing education opportunities and to "engage with Pacific island health Ministries to identify accurately their education needs"
- To work with governments and donors to better coordinate donor support and to align this support with the objectives of national HRH programs.

Section 3: Understanding the Educational Challenges[9]

An Inadequate Pipeline

Currently, the *educational pipeline* for Kindergarten through twelfth grade does not adequately prepare the vast majority of FAS students to qualify for and survive in, science-based health careers training programs within or outside of Micronesia. A few years ago, in one Micronesian country, only three students of every ten who enter the first grade end up graduating from high school.[10] FAS student performance in national standard tests, internal achievement tests, high school entrance tests, and community college entrance tests are generally discouraging.[11-16] Although English scores may be somewhat higher, scores in math and science in all three FAS countries are quite low. In one country math and science scores actually decrease as children progress to twelfth grade.[13] Interviews with Micronesians leaders identified "poor educational foundation" as one of the greatest barriers as well as the "lack of an organized career pipeline and limited academic preparation".[17] These educational challenges contribute directly to health worker shortages. Too few FAS students are prepared to enter, or even inclined to try entering, formal training programs for medicine, dentistry, nursing, allied health, public health or health services management.

Confounding the problem is a current workforce that is generally under-trained. This fact is especially acute among professionals in allied health, oral health, public health, and the health services management. For allied health, on-the-job training is the norm. For example, of the current fifty medical lab workers in the FAS, only six are formally certified and, of these, only two are Micronesian.

In addition, the workforce is aging rapidly. For oral health, almost all of the FAS mid-level dental nurses and technicians will retire within a short time. Many of the physicians produced by the University of Hawaii's Pacific Basin Medical Officers Training Program (1987-1996)[18], while well-trained[19], are past the mid-point of their careers and are increasingly retiring. This double dilemma of shortages and under-training is a discouraging and challenging obstacle for FAS country health services.

The education sector in the FAS faces a nearly identical "double dilemma" as the health sector: The Ministries and Departments of Education in each of the FAS countries struggle to provide adequate numbers of fully trained teachers who can teach math and science at the elementary and high school levels. Fixing the educational pipeline so that the majority

of FAS students master English, science, and math will take many years. In some jurisdictions, up to 53% of elementary and high school teachers are not professionally certified and have attained a high school diploma only.[12] Like many health care workers, many teachers learn their profession on-the-job, with minimal formal training.

Currently, the FAS community colleges are tasked with the difficult challenge of providing remediation programs for under-trained high school leavers and under-trained elementary and high school teachers. Education programs, such as the locally-funded Health Careers Opportunities Program at the College of Micronesia-FSM, and the US-funded Upward Bound, TRIO, and STEM Programs at Palau Community College, promote competency in foundation science courses and better prepare FAS high school graduates to qualify for, and survive in, science-based health training programs. Currently the Japan International Cooperation Agency (JICA) has eleven volunteer teachers in math and science assigned to Palau elementary and high schools. Most are assigned to elementary schools because - based upon JICA's international experience - host countries demonstrate the quickest improvement in mathematics when such teachers are assigned to the elementary level.[20]

Among the U.S. Pacific Flag Territories (American Samoa , Guam, Commonwealth of the Northern Marianas Islands), although there are greater percentages of K–12 certified teachers compared to the FAS countries, students still struggle to be competitive in entering science-based health careers programs. Those that succeed in qualifying for and succeeding in U.S. medical and dental programs, more often than not, do not return to their home islands citing lack of pay and diminished professional benefits compared to opportunities in Hawaii and the U.S. Mainland. Furthermore student tuitions at U.S. medical and dental schools are so expensive that students incur excessive student loans which, some claim, prevent them from returning to their home islands where lower salaries are the rule. For example, in the U.S. Pacific Flag Territories, which have some of the highest health professions shortage area scores (HPSA) in the U.S., lower per capita incomes and higher disease rates than U.S. states, Medicaid reimbursements at eligible institutions, until recently, have only been 50% of that received by U.S. states, which affect local physician salaries. Too few indigenous physicians and dentists have returned to their Flag Territories leading to an increase in the local licensing of non-U.S. trained physicians and dentists. In American Samoa at the only local hospital, U.S. federal program reimbursement schemes require that patients be treated by U.S. trained or certified physicians which threaten to disqualify the majority of Samoan physician workforce who have received their medical degrees and specialty residency training from medical schools in New Zealand and Fiji. The recent plan to shift a U.S. Marine contingent plus dependents from Okinawa to Guam will place further pressure on Guam's medical, dental, and public health services leading to the hiring of more expatriate health care workers and placing more pressure on the local K-12 educational pipeline to increase the numbers of local students needed to meet

Guam's increased health workforce needs – which are largely under-met today. Although there is a nursing shortage on Guam, the University of Guam' Nursing School cannot accept more qualified students because of the limited number of both academic and clinical nursing faculty and numbers of adequate clinical practice sites.

Bridging Programs: An Interim Solution

More promising, and often easier to establish and conduct, are local efforts to develop both accredited and non-accredited short-term *bridging and career ladder training programs* for the current health workforce. These programs focus on upgrading health workers in their respective disciplines. An excellent recent example is the in-country HRSA-funded Pharmacy Technician Training Program, which was managed by the University of Hawaii at Hilo and conducted by distance to Palau by the University of Alaska at Anchorage. Adapted from a U.S. Air Force curriculum, the program formally certified Palau pharmacy assistants as Pharmacy Technicians, after 600 hours of distance learning. Other successful bridging programs have certified Environmental Health workers and Substance Abuse Counselors and helped transition Nursing Assistants to Licensed Practical Nurse to Registered Nurses. However, progress is slow, funding for training episodic, and the frustrating workforce shortages persist. More innovative programs are needed, particularly for other allied health workers (laboratory technicians, radiographers, physical therapists), oral health personnel, public health workers, and health services managers. And all but forgotten are the medical records workers, medical librarians, and maintenance, laundry, food services, and security staff, who are rightfully included in the WHO definition of a health worker.

College of Health - A New Approach

In 2009 the Palau Ministry of Health began to initiate its College of Health concept – a management process to rationally organize and optimize continuing professional development for all Minister of Health personnel. Soon all health personnel working for the MOH will need to be licensed – not just the physicians, nurses, and allied health workers – but all personnel from the Minister on down including all health administrators, kitchen workers, security, maintenance staff, etc. Discipline specific continuing professional development (CPD) courses will then be provided for re-licensure including such general courses as orientation training for new workers (Ministry of Health 101), customer service / satisfaction, universal precautions, basic life support, and workplace health promotion and accident prevention. Both credited and non-credited courses will be provided where necessary. Minimum educational standards will be established for job positions that are health related – for example discussions are ongoing that in the future all entry administrative staff will have to have a minimum of an Associate of Sciences Degree in Public Health with specialty tracks in Health Services Management, Emergency Health Management, and Environmental Health, etc. in order to be hired. Current staff without such credentials would then be given the opportunity to attain an ASDPH or a Bachelors in Public Health over a three to five year period. Re-licensure and

promotion will depend upon attainment of minimum educational standards, annual CPD, and job performance. The Ministry will work with Palau Community College and other institutions of higher learning to provide face to face and distance Bachelors and Masters Degree training for select personnel. In tandem, Palau Community College is developing a School of Health Sciences and building a Health Sciences Building which will be co-managed by the Ministry of Health and may host regional universities and medical schools.

Discouraging Shortages in the Health Professions (and Some Innovative Solutions)

Nurses – The regional nursing workforce shortage is pervasive, chronic, and discouraging. An ongoing Nurse Mapping Project for the North Pacific—funded by WHO and conducted by the University of Hawaii School of Nursing and Hygiene—underscores the absolute shortages of Registered Nurses among the USAPI. About 300 new RN's are needed now.[21] The shortages range from as high as 100 needed on Guam to twenty in the RMI. Licensed Practical Nurses, Midwives, and Advanced Practice Nurses are also in short supply. *However, the number one problem facing the nursing education pipeline is a serious shortage of qualified nursing faculty.* Though there are seven nurse training programs in the region, the enrollment in these programs is significantly limited by a shortage of qualified and seasoned nursing faculty and paucity of adequate clinical practice sites.

But not even more faculty will fully address the shortage: In one jurisdiction, recent graduates from the local nursing school cannot find jobs because the government, which is experiencing a nursing shortage, has no funds to hire them. How widespread this problem will become is unknown and may be contributed to by the recent economic recession. If nursing students are not being hired upon graduation, this will affect student morale and may discourage students from remaining in school, which will only contribute to the problem.

Poor workplace environments and low salaries also affect morale and discourage students from choosing nursing as a career. In some jurisdictions, the number of qualified RNs is so low that nurses feel guilty when taking much-deserved annual or emergency leave, due to the double shifts their absence forces upon colleagues.

In spite of these discouraging problems, local institutions of higher learning are making slow but positive inroads. One program with particular promise is the Partners in Nursing Futures Program (PIN) at the College of the Marshall Islands (CMI). In 2009, the CMI Nursing Program, on behalf of the nursing workforce in the Freely Associated States, received a grant resulting from a partnership between a

community coalition and the Robert Wood Johnson Foundation. The grant develops the capacity of regional nurses to serve as Nursing Faculty. If successful, this program will increase the number of nursing faculty and provide quality, in-country, hands-on training to nursing students and the nursing workforce. The PIN Program is an innovative collaborative, partnering with other regional nursing programs at Palau Community College (PCC) and the soon-to-be established COM-FSM Nursing Program, along with FAS Ministries and Departments of Health, to develop and strengthen local clinical nurse faculty. The PIN Program is using innovative clinical nursing training models in the jurisdictions, to positively affect the nursing environment and help transform the workplace into a healthful, attractive, and satisfying setting.

Also encouraging is the 2009 approval of COM-FSM's application to the Western Association of Schools and Colleges—the accrediting body that certifies education programs in universities, colleges, community colleges, and high schools in California, Hawaii, and the USAPI—for a new nursing program at COM-FSM. This great news was linked to the recent capture, by the University of Guam School of Nursing, of a competitive HRSA-funded Basic Area Health Education Grant, which will partially fund nursing training at Guam Community College, College of Micronesia-FSM, and the College of the Marshall Islands. In addition to nursing, the Guam-Micronesia AHEC will promote public health training and/or health careers readiness training at these same sites. With its executive leadership and its nursing faculty expertise, UOG School of Nursing has further established itself as a premier nursing resource for nurse workforce development in the Western Pacific.

The USAPI nursing workforce, represented by the American Pacific Nursing Leaders Council and supported by PIN, the WHO and regional nursing schools, needs substantive, focused, and sustained assistance by U.S. Government agencies—and particularly the Departments Health and Human Service and Interior—to address the nursing shortage crisis. This crisis threatens the very core of health services in the USAPI.

Allied Health Workers – Allied health workers among the FAS countries are generally trained on-the-job, often by others who have no formal certification in their discipline. Though much training occurs in the region, the training is usually grant related and coordinated by external organizations, such as HRSA, CDC, SPC, and the WHO. Such training is usually short-term, episodic, informal, un-accredited and not recognized by local government personnel departments. As a result, health service staff who participate in such training are not compensated for the increased responsibilities that skill upgrades usually entail.

For medical laboratory workers (MLW), a partial solution to the challenge of skilling-up the current allied workforce are efforts by WHO's Pacific Open Learning Health Network (POLHN). POHLN has partnered with the Pacific Paramedical Training Program in Wellington, New Zealand, to provide distance learning courses to Micronesian MLWs. The courses are provided through POLHN's distance learning Internet platform, using computer labs set up either through the WHO or through local funding in each of the FAS hospitals. Negotiations are ongoing with the Fiji School of Medicine to develop articulation agreements so that MLWs who complete the core set of POLHN courses by distance can qualify for advance standing in the FSMed's Medical Laboratory Technician/Technologist Training Program in Suva, Fiji.

Mid-level Oral Health Workers –A whole cadre of mid-level dental nurses, originally trained at the Micronesia Occupational Center in Palau in the 1980's, are retiring. There are a few promising local and regional efforts to train dental hygienists and mid-level oral health practitioners. For example, the Ministry of Health in Palau initiated a two-year dental hygienists training program, through which twelve Dental Assistants receive extensive academic and hands-on training. (Of these, three have been accepted to the Fiji School of Medicine Dental School for dentistry training.) In addition, at the request of the Pacific Basin Dental Association, PIHOA is partnering with regional governments and consultants to establish a regional Dental Therapy Training Program. Although funding efforts to capture a HRSA grant were not successful (April 2010), preliminary discussions have started with the Fiji School of Medicine Dental School to utilize prospective AUSAID funding and other resources to establish the Dental Therapy Training Program in Micronesia.

Public Health Workers – Although HRSA, CDC, SPC and WHO have provided much programmatic and grant-related public health training in the region, the training is not accredited and is not recognized by local government personnel departments. As a result, public health workers (PHWs) are often given increased job-related responsibilities without commensurate increases in salary. This lack of compensation, with no clearly recognized career public health track, affects morale and work performance negatively.

In 2003 the Palau AHEC based at Palau Community College, in partnership with the Fiji School of Medicine, initiated in-country undergraduate and postgraduate training in public health for regional PHWs in the FAS countries.[22-24] Over 100 face-to-face public health courses were conducted, resulting in more than 300 physicians, nurses, allied health workers, health administrators, and nutrition workers being trained. Building on this experience, PCC collaborated with COM-

FSM to establish a WASC-accredited Associate of Sciences Degree in Public Health (ASDPH) at COM-FSM[25]. Partial funding for the program is now being provided by the newly-established UOG Guam/Micronesia AHEC. Besides training PHWs, the ASDPH program will serve as an accredited educational platform for a variety of career tracks, including oral health professionals, behavioral health workers, and First Responders. Currently 103 students are registered in the ASDPH program at COM-FSM. At PCC, a problem-based learning (PBL) format curriculum is being developed to initiate a similar ASDPH program which includes an ASDPH track with an emphasis on Emergency Health Management being developed by CDC's Pacific Emergency Health Initiative. Additional specialty tracks are in the discussion phase to include Nutrition, Behavioral Health, Oral Health, and others. Negotiations are currently ongoing with the School of Public Health at San Diego State University (SDSU) to implement a blended learning program (face-to-face and distance learning) to take ASDPH graduates and other community colleges degree graduates to a Bachelors in Public Health. Additionally, besides the PBL curriculum being developed at PCC, preliminarily discussions are in various stages in the RMI, CNMI, and American Samoa to start similar ASDPH programs. UOG is also developing new concentrations in undergraduate Public Health and Environmental Health In August 2010PIHOA sponsored a *Workshop on Public Health Training in the USAPI* before its 49th PIHOA Meeting. The Workshop was hosted by the Department of Public Health Sciences, John A. Burns School of Medicine, University of Hawaii at Manoa and invited representatives from public health programs at SDSU, Fiji School of Medicine, Hawaii Pacific University and the proposed public health tracks at the University of Guam. In September 2010 PIHOA became formally part of the University of California Berkeley's HRSA-funded School of Public Health CAL-PAC Training Center. CAL-PAC Center funds combined with Palau AHEC funds will be used to contract a full time Regional Public Health Training and Curriculum Coordinator to be based at Palau Community College and the Palau Ministry of Health.

Medical Records Professionals, Cancer Registrars, Medical Librarians (and Other Forgotten Workers) – PIHOA recently partnered with the Department of Family Medicine and Community Health (DFMCH) at UH JABSOM to inventory the work and training needs of select medical records and cancer registry workers in the Freely Associated States and American Samoa. This class of workers is often overlooked when training resources are secured and allocated at health ministries and departments. Through DFMCH's efforts, and using resources available through its CDC-funded Cancer Registry grants, cancer registry positions are being developed and strengthened throughout the USAPI. Timely grant-related training resources, equipment, and supplies are now available to cancer registry workers. As a result, these workers are being measurably empowered.

Nonetheless, the success of cancer registry workers depends upon the robustness and quality of work of fellow workers - in this case their fellow medical records colleagues. Medical records departments in many of the jurisdictions are chronically understaffed and under-trained. Staff usually lack clear policies and procedures and interact with weak and dysfunctional IT systems prone to frequent service disruptions. They suffer in small spaces, with inadequate shelving and supplies. They, like many other health workers, are under-represented and underfunded, especially in external grants , and lost in the clamor for resources among the more vocal nurses, physicians, and allied health workers. It is therefore not surprising that medical records retrieval systems are inefficient and medical records data collection is flawed. These weaknesses are major challenges to health care systems, which are now more and more dependent on good data to drive planning, improve outcomes, and capture competitive - and data-driven - grants.

Circling back, these weaknesses in the medical records departments affect the quality work of cancer registrars who, though fortunate to receive grant -funded training and resources, are dependent upon medical records technology, staffing, and quality. But what can be done? There are no specific grants or resources in most jurisdictions that target medical records workers, or for that matter the other forgotten workers, such as medical librarians, clerks, food handlers, and laundry, maintenance and security personnel. These professionals are vital for a well-functioning health care system, but their training, if they receive any, is usually ad hoc and (once again) not accredited and not part of any career ladder.

To help address these problems, the Palau Ministry of Health is developing a "College of Health" concept, in which all health personnel working for the Ministry must be licensed and must receive continuing professional development (CPD) in their respective disciplines. These disciplines include - besides those jobs traditionally and almost exclusively thought of as health professions - medical records, cancer registrars, and maintenance, kitchen, and security workers. The Ministry is also making efforts to partner with Palau Community College to link CPD to an accredited career ladder structure.

The Power of Two - Through extraordinary efforts of two regional librarians with funding through the Robert Wood Johnson Foundation, six medical libraries are being established in the USAPI at regional hospitals. Through their efforts and in conjunction with the AYUDA Foundation of Guam, eight of nine regional medical librarians were funded through the U.S. National Library of Medicine Southwest Region-UCLA and Continental Airlines to attend the 20th Pacific Island Libraries, Archives and Museums Conference in Chuuk State, FSM. On the agenda is the

development of a Regional Association for Medical Librarians. An effort is also underway to adapt an Associate of Sciences Degree in Library Sciences at PCC to include training medical librarians by distance. The challenge will be finding the resources to make it so.

Other Opportunities - In July 2009, the Micronesian Chief Executives Summit (MCES) process directed its Health Committee to begin conversations with the Fiji School of Medicine (FSMed) to look at the feasibility of establishing health careers training programs "up North" in Micronesia. The MCES, which meets twice a year, comprises of the Presidents of the ROP, FSM, and RMI and the Governors of Guam, CNMI, and the FSM States of Yap, Chuuk, Pohnpei, and Kosrae. To this end in March 2011 the Dean of the Fiji School of Medicine will take a familiarization trip through Micronesia to meet with health and political leaders to discuss the development of such health careers programs. On the agenda are discussions to include the in-country training of Medical Laboratory Technicians, Dental Therapy Technicians and incorporating the FSMed basic Foundation Sciences courses into the local Micronesian community college curricula. Mastery of the Foundation Sciences courses are seen as key to Micronesian student success in year one of FSMed training programs in Fiji – especially in medicine, dentistry, and allied health. With the development of a FSMed campus and programs "up north", Micronesian students will have the opportunity then to study Foundation Sciences at their local community colleges as a pre-requisite to being awarded WHO, AUSAID, and Taiwan scholarships before going on to medical and dental school. Other students after taking Foundation Sciences courses locally may be able to matriculate at Allied Health programs taught locally by the FSMed.

Section 4: Responding to the Challenge

I. PIHOA's Response

HRH development is admittedly asymmetric. As Dr. Lee stated above, "The solution is not straightforward, and there is no consensus on how to proceed" [1]. Complicating this challenge is PIHOA's large Pacific backyard, which spans five-time zones and includes scattered islands with fifteen-diverse languages and cultures that are at different levels of economic and educational development and with a wide range of per capita incomes. Regional income disparities range from a few thousand dollars per annum, in the Freely Associated States, to near US-level salaries in select Flag Territories.

Nonetheless, PIHOA focused on developing and expanding its overall Nahlap HRH Action Plan and putting its words into actions for health. These actions include:

- **Strategic Planning for Human Resources for Health:** In response to its Nahlap HRH Action Plan (2006), and assisted by WPRO/WHO, PIHOA initiated an HRH strategic planning process to assist PIHOA members with developing their own local HRH plans. In addition, PIHOA held a Regional HRH Planning Meeting on Guam in October 2009, to develop a Regional HRH Strategic Plan. PIHOA has also become an active member of WHO's Pacific Human Resources for Health Alliance (PHRHA) and advocated for a HRH101 pilot course which will be tested in the RMI in November 2010.
- **PIHOA Health Professions Licensing Board Development Project:** PIHOA partnered with the Pacific Basin Medical Association (PBMA) to develop and strengthen health worker licensure and continuing professional development activities. Utilizing as a model medical licensure legislation established in Palau in 2000, the outcomes of the PBMA studies included the development of Licensure Boards in both the FSM and RMI. WHO's PHRHA will revisit this issue and the status of continuing professional development (CPD) in the FAS countries in 2011 and provide a progress report on regional licensure board and CPD development.
- **Quality Assurance:** Developed an ongoing regional Quality Assurance and Improvement Initiative resulting in QA assessments in eight sites; new QA committees in four sites; QA Officers hired in six sites; and PIHOA-funded QA improvement projects in two sites.

- **Basic Nurse Training:** Collaborated with the FSM and COM-FSM to develop an accredited Associate of Science Degree Nursing Program. The first class is anticipated to begin matriculating in 2011.

- **Nursing Education:** Collaborated to assist in developing regional clinical nursing faculty training at the College of the Marshall Island's Partners in Nursing's Future Project and, worked with PCC's Palau AHEC and Kapiolani Community College in Honolulu to facilitate a formal program evaluation of the Nursing Program at PCC.
- **Public Health Training:** Worked with the Palau AHEC, PCC, and the Fiji School of Medicine to facilitate regional public health training in the ROP, FSM, and RMI and then assisted PCC and COM-FSM in establishing an accredited Associate of Sciences Degree in Public Health Program at the COM-FSM.[21] PIHOA is also facilitating the development an ASDPH program at PCC and working with regional Schools and Programs of Public Health to develop an undergraduate program in Public Health at the University of Guam and other regional community colleges. PIHOA has also partnered with the UC Berkeley School of Public Health CAL-PAC Training Center and PCC's Palau AHEC to fund a regional Public Health Training and Curriculum Coordinator. In August 2010 PIHOA conducted a Workshop on Public Health Training in the Pacific to assist UOG in developing its undergraduate Public Health track. Soon, PIHOA anticipates working with the SDSU School of Public Health to deliver in-country Bachelors and Masters in Public Health courses by distance for the regional public health workforce.
- **Capturing HRH Resources:** Collaborated with the Hawaii / Pacific Basin AHEC (JABSOM) to assist the University of Guam School of Nursing to capture a separate and new core AHEC Grant (Guam / Micronesia AHEC) to fund new AHEC satellite Centers at Guam Community College, CMI, and COM-FSM in order to implement a mix of nursing and public health training and health careers readiness programs.
- **Pharmacy Training:** Worked with the Palau MOH to facilitate a successful University of Hawaii-Hilo / University of Alaska-Anchorage Pharmacy Technician Distance Learning Training Program at PCC and the Palau MOH Ministry of Health.
- **Workforce Development:** Currently working on developing / facilitating either basic education or continuing professional development programs for oral health workers, medical lab assistants, medical records and Cancer Registry workers, and medical librarians.
- **Regional Health Policy Development:** In 2008 became the Secretariat for the Health Committee of the Micronesian Chief Executives Summit (MCES) whereby twice a year the Presidents of ROP, FSM, and RMI and the

Governors of Guam, CNMI and the FSM States of Chuuk, Kosrae, Pohnpei, and Yap meet to set policy and action plans for the region. HRH issues have become one of the MCES Health Committee's top priorities.

- **NCD Declaration and HRH:** In May 2010 PIHOA passed a resolution establishing a "Regional State of Health Emergency Declared Due to Epidemic of Non-Communicable Diseases In the United States Affiliated Pacific Islands".[3] PIHOA will now adjust its priorities, including HRH, to address epidemic of NCDs. At its 50th meeting in Palau (April 2011), PIHOA, its affiliates and partners will develop a roadmap to include HRH to effectively address NCDs which are the leading causes of death in the region.

Table 2: Timeline for Key HRH Planning Events & Projects in USAPI

HRH Project or Event	Dates	Product / Facilitator
WHO World Health Report: "Working together for Health"	April 2006	Initiated Formal HRH Planning Activities
42nd Regional PIHOA Meeting & HRH Workshop. Participants included PIHOA Board, Affiliate (organizational) Members, and a WHO Consultant	08/3-6/2006	Nahlap HRH Action Plan / PIHOA Board
PIHOA Health Professions Licensing Board Development Project –Reports completed for: • Federated States of Micronesia • Republic of the Marshall Islands	 03/2007 08/2007	Facilitator: AM Durand AM Durand
PIHOA Hired New Executive Director	4/2007	M Epp
PIHOA-WHO HRH Planning Project – Country reports completed for: • FSM Dept of Health & Social Affairs • Chuuk State Health Services • Kosrae State Health Services • Pohnpei State Health Services • Yap State Health Services • RMI Ministry of Health & Environment • CNMI Department of Public Health • ROP Ministry of Health • Guam Dept of Health & Social Services • American Samoa Department of Health	 12/2007 12/2007 12/2007 12/2007 12/2007 03/2008 06/2008 10/2009 (Draft) 10/2009 (Draft) Postponed to 2010	Facilitator: AM Durand AM Durand AM Durand AM Durand AM Durand AM Durand G Dever J Merrill
PIHOA Quality Assurance and Improvement Project. QA Assessments	2007 and ongoing	AM Durand

completed for: • Chuuk State Health Services • Kosrae State Health Services • Pohnpei State Health Services • RMI Ministry of Health & Environment • ROP Ministry of Health • Guam Dept of Health & Social Services • Tafuna Family Health Center (American Samoa) QA Improvement project completed for: • Pohnpei State Health Services		
PIHOA HRH Committee Established	2008	G Dever et al
PIHOA Hired Full Time Regional HRH Coordinator	2009	G Dever
PIHOA facilitated 11th MCES directive to begin discussions with Fiji School of Medicine to establish FSMed programs "up north".	July 2009	G Dever et al
PIHOA Regional HRH Planning Meeting/ Guam Hosted by University of Guam Nursing School PIHOA Board & Affiliate Members	10/28-30/2009	Reviewed Country HRH Plans & Initiated Regional HRH Plan
PIHOA 48th Regional Meeting / Pago Pago	3/28/2010 - 4/1/2010	Review Draft Regional HRH Plan and formulated Draft HRH Resolution
PIHOA passed Resolution 48-06: "Regional State of Health Emergency Declared Due to Epidemic of Non-Communicable Diseases In the United States Affiliated Pacific Islands"	24 May 2010	This resolution will become the guiding focus for all PIHOA priorities which will be looked at through the lens of NCDs action planning and implementation.
PIHOA Regional HRH Coordinator met with Dean, School of Public Health, San Diego State University	19 July 2010	Initial meetings to develop distance learning Bachelors and Masters Degrees in Public Health
Workshop on Public Health Training for the USAPI	28 August 2010	Invited participants included Public Health programs UH Manoa,

		SDSU, FSMed, Hawaii Pacific University, and UOG
PIHOA 49th Regional Meeting / Honolulu	30 August 2010 – 3 September 2010	Deans of School of Public Health at SDSU, and FSMed presented to Board
PIHOA evaluated WHO's Pilot HRH 101 course in RMI	9-10 November 2010	Taught by Prof. P. Davies, U. Queensland
Fiji School of Medicine makes commitment at Pacific HRH Alliance meeting to establish campus and programs "up north" including Dental Therapy Training in response to 11th MCES directive.	9-11 February 2011	FSMed Registrar Apenisa Ratu presents to PHRH Alliance.

II. Local Planning for HRH: A Critical First Step

In recent years there has been an increasing awareness of the importance of systematically planning, cultivating and managing human resources for health in order to assure the success of health programs for improving the health of populations. WHO declared 2006-2015 the Decade of Human Resources for Health while PIHOA, in its 2004 strategic plan, selected HRH development as one of 10 strategic priorities and, in its 2006 Nahlap Resolution, selected HRH as its top priority. Both the WHO and PIHOA in their HRH strategies call for support of health workforce planning at the national level and for working together on HRH issues across jurisdictions.[1,2,4,5,26]

The WHO HRH Action Framework

In order to facilitate HRH planning and collaboration, PIHOA, with financial support from WHO, provided technical assistance for HRH planning to member jurisdictions. WHO has also developed a framework for building the health workforce, the *WHO HRH Action Framework*, upon which this project is based.[27-29]

Between February, 2008 and the present, the following health workforce jurisdiction assessments and planning workshops were conducted: CNMI, RMI, FSM National, Chuuk State, Kosrae State, Pohnpei State, and Yap State. Work on the Guam and Palau assessments and plans are in draft form. An assessment and planning workshop in American Samoa is planned for 2010-2011 (updating a plan conducted by the Department of Health in 1999-2000).

A planning project such as this must take into account both the considerable differences and the similarities among PIHOA member states in the organization of their respective health sectors. For example, while there are substantial private health sectors on Guam, CNMI, Pohnpei and Palau, the large majority of health services are still delivered by government in the CNMI, ROP, FSM, RMI, and American Samoa. Public health and curative services are under unified government administration in some jurisdictions (FSM, ROP, CNMI, RMI) and separated in others (Guam, American Samoa). Guam, the CNMI and American Samoa are eligible for U.S. Medicare and Medicaid programs, while the FSM, ROP and RMI currently are not. The jurisdictions that accept Medicare and Medicaid are also required to adhere to U.S. medical licensing requirements, which restrict the participation of physicians who are educated outside of the U.S. None of the jurisdictions are able to provide the full range of tertiary care services on island, and all face pressure to apply their limited resources toward referral of citizens for off-island care. The "brain drain" has a major impact on all of the jurisdictions and all rely to a substantial degree upon expatriate health workers. The reliance on expatriates is growing in many of the jurisdictions, but decreasing or stable in others (ROP, Yap, Kosrae, and possibly, Guam). Government civil service systems which have been in place for many years limit the flexibility of health administrators in managing government sector health workers and have a large impact on salary structures in all of the jurisdictions. All of the jurisdictions are dependent on external educational institutions for the training of physicians and most other health workers.

Outside of the health sector, another notable similarity among all of the jurisdictions is the existence of accredited local colleges with an interest in providing vocational training to meet the needs of local communities. Nursing programs, which are well-regarded academically, are available at local colleges in all of the jurisdictions except for the FSM whose newly accredited program is just getting off the ground. However, nursing graduates do not begin to approximate the identified shortages of nurses – particularly clinical nurses.

Planning Methodology

Plans for each of the jurisdictions developed to date were formulated during 3 day on-site workshops using the WHO Action Framework as a guide. Pre-consultation materials, including the Action Framework[27] , and the Pacific Islands Guide to Rapid Assessment of Human Resources for Health using the HRH Action Framework, were sent out to prospective participants at each workshop site for review prior to face-to-face workshops. Other documents relating to health workforce planning in the jurisdiction were solicited from WHO, PIHOA and local health leaders. These materials were reviewed and processed to yield a picture of current data regarding

the workforce that was presented to workshop participants. An assessment of the current situation was compiled using the Pacific Island Countries Guide to Rapid Assessment mentioned above. The Director, Minister or Secretary of Health (or his or her designate) in each jurisdiction identified stakeholders for participation in the planning workshop. Typically these included the following:

- DOH project counterpart
- DOH secretary, minister of director and senior staff members
- Local college dean of academic affairs, and college health professions faculty
- Area Heath Education Center coordinator
- Public School System commissioner
- Representative from government scholarship office
- Representative from the attorney general's office
- Legislature health committee representatives
- Public Service Commission representative
- Medical and nursing association representatives

The workshops consisted of orientation to prior plans, initiatives and the current situation; review of current HRH-related activities of participating organizations; identification of areas of special concern; development of a vision for where the jurisdiction might be positioned with regard to the health workforce 10 years into the future; an inventory of available resources which might be useful for health workforce development; "brainstorming" to select priority issues, then to develop clear objectives and specific activities needed to accomplish objectives. These were fashioned into action plans which included timelines and assignment of responsibility for specific actions. More in-depth interviews with key individual participants and with stakeholders who were not able to attend were conducted in the days following the workshop for further input into the action plan. Most of the objectives and activities which emerged from this process had a 1-3 year time frame. The plan was then distributed to all by e-mail for additions, corrections, and comments. Feedback was incorporated into the plans and a final version was again submitted to the Director, Secretary or Minister of Health for endorsement.

Overview of Jurisdiction HRH Action Plans

Table 3 summarizes the Jurisdiction HRH Action Plan Goals gleaned from eight of the nine *Completion Reports* from PIHOA-WHO Human Resources for Health Planning Project conducted from December 2007 through October 2009. As stated, the American Samoa Project was deferred to 2010-2011 because of devastation from the recent tsunami in September 2009. It's clear that seven of the eight studied jurisdictions, as diverse as they are in population, culture and language, economic development, educational and health services capacity, share many

common HRH challenges. However, Guam, with its larger population, higher per capita income, and robust private health sector, has HRH challenges more similar to that of the U.S. Mainland. Common Country HRH Goals include:

1. Increase the supply of Nurses (and Nursing Specialists);
2. Increase the supply and professional skills of local physicians (primary care and specialists), allied health workers, mental health workers, maintenance & supply workers;
3. Provide formal training of the health workforce, increase scholarships, and increase the capacity of local community colleges to provide such training;
4. Create HRH entities and/or strengthen and develop existing HRH mechanisms;
5. Strengthen and/or develop policies and procedures to strengthen availability, recruitment, retention, and management of the health workforce;
6. Strengthen partnerships.

Table 3: *Jurisdiction HRH Action Plan Goals from Country HRH Completion Reports*

Federated States of Micronesia Action Plan – Goals 12/2007
1. National Government - Department of Health and Social Affairs - HRH Action Plan
1. Relieve acute nursing shortage in FSM 2. Build institutional capacity for health services administration to develop partnerships and opportunities for health worker training. 3. Build institutional capacity of COM-FSM for development and delivery of in-country and decentralized health worker training programs. 4. Improve the supply of qualified candidates for health worker training via COM-FSM and elsewhere. 5. Improve foundation training of lab workers at each state hospital. 6. Improve foundation training of X-Ray workers at each state hospital. 7. Improve foundation training of inventory and supply workers at each state hospital. 8. Raise standards for the practice of health professions in the FSM. 9. Improve the quality of care delivered by health assistants in outer islands by improving physician oversight of their work. 10. Improve policy making regarding the training needs for the FSM health workforce. 11. Improve the supply of physicians and other advanced health workers in the FSM.
2. Kosrae State Department of Health Services - HRH Action Plan Goals 12/2007
1. Improve the supply of fully credentialed nurses in Kosrae. 2. Replace expatriate physician specialists with local staff (surgeon, anesthesiologist and OB-Gyn). 3. Upgrade skills levels of allied health workers.
3. Pohnpei State Department of Health Services - HRH Action Plan Goals

12/2007
1. Improve the supply of fully credentialed nurses in Pohnpei State. 2. Improve the coordination and performance of the existing health workforce. 3. Improve the availability and sustainability of health worker training programs in Pohnpei. 4. Improve the performance of the Inventory and Supply unit at Pohnpei DHS. 5. Upgrade professionalism and skill levels of public health workers. 6. Upgrade skills levels of allied health workers. 7. Improve the supply of skilled dental workers in Pohnpei State. 8. Improve the performance of Health Assistants serving the outer islands. 9. Sustain the HRH planning momentum.
4. Chuuk State Department of Health Services – HRH Action Plan Goals 12/2007
1. Improve the supply of fully-credentialed nurses in Chuuk. 2. Improve the supply of fully credentialed specialist nurses in Chuuk. 3. Improve the availability of better skilled health workers to outlying areas of Chuuk.
5. Yap State Department of Health Services – HRH Action Plan Goals 12/2007
1. Produce 16 new associate-degree level nurses. 2. Improve coordination among Yap AHEC, Yap COM-FSM, Yap DHS, Yap DOE. 3. Improve basic academic skills of health professions students. 4. Use state and WHO / AUSAID scholarships more effectively to provide for needed health professionals on Yap. 5. Improve recruitment and retention of hard-to-fill health professions.
6. Republic of the Marshall Islands – HRH Action Plan Goals 3/2008
1. Accelerate workforce development and assure a sustained focus on HRH within the RMI. 2. Develop RMI nationals to replace expatriate health professionals. 3. Phase out on-the-job trained health workers 4. Upgrade on-the-job trained workers with formally qualified educational programs. 5. Improve government personnel policies and procedures to better support the MOH mission. 6. Strengthen the standards for health professions credentials in the RMI.
7. Commonwealth of the Northern Mariana Islands–HRH Action Plan Goals 6/2008
1. Increase the number of CNMI resident RN-level nurses to 300 by year 2018. 2. Upgrade standards for drug and alcohol and mental health counselors. 3. Improve financial status of DPH by optimizing the use of personnel. 4. Decrease the difficulty in recruiting primary care physicians to the CNMI.
8. Republic of Palau – HRH Action Plan Goals 10/2009

1. Develop a MOH HRH Task Force
2. Develop, strengthen, and standardize and fully support implementation of HRH policies and procedures for clinical, public health, and administration regarding HRH issues
3. Develop succession planning strategies to identify, nurture, financially support, and direct MOH staff and able non-MOH staff into health careers opportunities that match MOH current and future workforce needs.

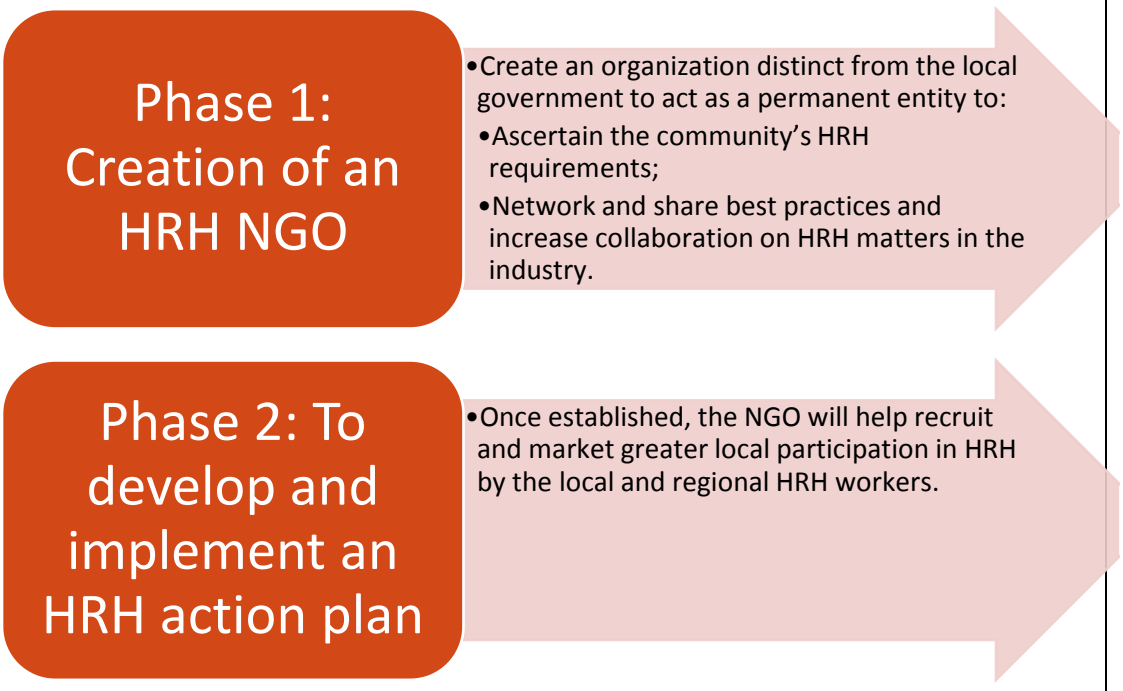
9. Guam – HRH Action Plan Goals
10/2009

Phase 1:

1. Create an HRH Non-Governmental Organization (NGO) distinct from local government to act as a permanent entity to:
   - ascertain the community's HRH requirements
   - network and share best practices
   - increase collaboration
2. Develop and implement the following Action Plan:
3. To optimize the quality of the healthcare workforce on Guam.
4. To promote local participation and diversity within the workforce to improve access to health care.
5. To promote respect and recognition of the value of health care employees.
6. To improve the training, equipping, and rewarding of the health care workforce resulting in reproducible value.

Phase 2:

7. Once established, NGO will help recruit and market greater local participation in HRH by the local and regional HRH workers.



III. Regional Planning for HRH

A. Meta-Analysis of Jurisdictions Plans: Finding the Common Ground for Regional Action

The jurisdictional HRH plans provide the foundation for understanding the regional strategies and activities that can maximize success at the local level. What follows is a brief summary of themes that cut across all or most of the local HRH plans. These themes suggest where the regional infrastructure might best be built. The themes are organized according to the WHO Action Framework[27-29], which organizes information into six HRH Action Fields, as follows.

1. **Human Resources Management** – In the area on HR Management recommendations addressed the need for overall health planning which ten would guide HRH planning including recruitment. Health worker conditions were targeted: the need to increase recruitment and retention, improve working conditions and aligning salaries with performance and productivity systems. Management also needed to develop and strengthen HRH data bases.

2. **Leadership** – Leadership recommendations included delegating HRH matters to HRH offices and work groups and seeking assistance from external agencies such as WHO's Pacific HRH Alliance and, closer to home, PIHOA for help in periodically updating local HRH plans.

3. **Policy –**Policy recommendations dealt with revising pay scales and job classification systems, allowing local scholarships to be applied also to on-island health careers programs, adopting incentive performance and productivity-based systems, establishing Quality Assurance programs, providing financial support for health students, requiring formal (accredited) training for Health Assistants and others, harmonizing local licensure laws / regulations with external qualifications exams to support local health workforce needs, recruiting skilled expatriates who can also serve as adjunct faculty, requesting donors that hire Public Health officers to require teaching as adjunct faculty for local Public Health training programs, and requesting TA to evaluate task assignments and staffing mixes of the workforce.

4. **Finance –** Finance included requesting Public Health program donors to support local college Nursing and Public Health training programs, shift scholarship funds for on-island use, use health sector funds and WIA program funds for college programs on island, and apply guest worker fees to incentives for teachers and nurses in training.

5. **Education** – For education, recommendations included developing on-island training programs for nursing, mental health and substance abuse (MH&SA) workers, dental nurses, and other allied health workers; subscribing to distance programs (i.e. University of Alaska), adapting for local delivery on-site, or via WHO's POLHN; utilizing senior health service staff as adjunct faculty, sharing curricula developed in other jurisdictions; identifying training attachment sites for medical supply workers; delivering supplemental math, language, study skills to high school students who want to pursue health careers; and inviting regional medical schools to establish satellite sites in USAPI jurisdictions.

6. **Partnerships** – Proposed recommendations for partnerships included establishing formal work groups among partners, establishing formal MOUs between colleges, MOH/DOH, and AHECs for implementation of joint training programs, working with local colleges to serve as platform for delivery of identified curricula for allied health, using MOH/DOH programs to provide local case studies for Public Health students, inviting accredited newcomer colleges to establish satellite programs for certain allied health training, developing articulation agreements among local and regional colleges, and exploring partnership creations with regional medical schools to establish satellite sites (for allied health , MPH/MA degree programs, residency programs) or to reserve slots for students from region.

Table 4: *Meta-analysis of Country HRH Completion Reports*[30]

Meta-analysis of Country HRH Completion Reports / Dr. A. Mark Duran, PIHOA Consultant
1) HRH Management **A) Challenges** • Lack of skills/training opportunities for HRH officers • Expense/difficulty recruiting expatriate health care workers (HCWs) • Poor HCW motivation & productivity • Poor supervisor skills • Lack of performance standards, policies, procedures, QA • Out-migration of HCWs **B) Proposed Solutions** • Increase HRH Recruitment • Adopt pay for performance/productivity systems • Improve working conditions (especially for nurses) • Build HRH databases • Develop strategic plans for health (which will guide HRH planning) **2) Leadership**

A) Challenges

- Lack of sustained attention to HRH development

B) Proposed Solutions

- Delegate HRH attention to HRH officers and work groups
- Join WHO's Pacific HRH Alliance
- Request PIHOA assistance to update HRH plan periodically

3) Policy

A) Challenges

- Scholarships only available for off-islands study
- Low priority of HRH (compared with referral programs, etc.)
- Low pay scales (esp. nurses) compared with other jobs
- Licensure laws/regulations that block best use of available HCW's
- Outdated/inflexible personnel policies
- Orientation of workforce to curative care, central hospitals

B) Proposed Solutions

- Revise pay scales, job classification systems
- Apply scholarships to on-island as well as off-island study
- Adopt performance and productivity based pay systems
- Establish QA programs
- Provide cost of living stipends/jobs to students in training
- Adopt requirements for formal training for HA's and others (as training opportunities become available)
- Change licensure laws/regulations (re: NCLEX, ECFMG, etc.)
- Recruit expat HCWs who can serve as adjunct faculty
- Request donors that hire PH program officers to require teaching as adjunct faculty in PH programs
- Request TA to evaluate task assignments/staffing mix of health workforce

4) Finance

A) Challenges

- Brain drain because of salary differences
- Lack of budgeted positions for newly graduated HCWs
- Rising salary requirements for US qualified docs
- Insufficient scholarships to meet need for off-island training
- High cost of educating HCWs (using conventional approaches)

B) Proposed Solutions

- Request PH program donors to support local college nursing and PH training programs
- Shift available scholarship funds for on-island use
- Use health sector funds and WIA program funds for college programs on island
- Apply guest worker immigration fees to incentives for teachers and nurses in training

5) Education

A) Challenges

- Poor academic preparation of HS grads
- Lack of interest/confidence of youth in health careers

- Reliance upon informally trained HCWs
- Lack of accessible training opportunities for various types of HCW
- Aging of indigenous workforce
- Limited CE for non-doctors
- Inadequate output of nursing programs

B) Proposed Solutions

- Develop on-island training programs for nursing, MH&SA, dental nurses, other allied health
- Subscribe to distance programs via University of Alaska (or adapt for local delivery on-site or via WHO's POLHN)
- Use senior health service staff as adjunct faculty
- Share curricula developed in other jurisdictions
- Identify training attachment sites for med supply workers
- Deliver supplemental math, language, study skills to HS students who want to pursue health careers
- Invite regional medical schools to establish satellite sites

6) Partnerships

A) Challenges

- Need for better teamwork among various agencies
- Disorganization of effort among various funding agencies

B) Proposed Solutions

- Establish formal work groups among partners
- Establish formal MOUs between colleges and DOHs (and AHECs) for implementation of joint training programs
- Work with local colleges to serve as platform for delivery of identified curricula for allied health
- Use DOH programs to provide case studies for PH students
- Invite accredited newcomer colleges to establish satellite programs for certain allied health training
- Develop articulation agreements among local and regional colleges
- Explore partnership creation with regional med schools to establish satellite sites (for allied health , MA degree programs, residency programs) or to reserve slots for students from region

B. PIHOA Regional HRH Planning Meeting

In October 2009, PIHOA convened a Regional HRH Planning Meeting on Guam. The meeting was hosted by the University of Guam and the Guam Department of Health and Social Services. The purpose of the meeting was to:

- Identify and, to the extent feasible, address barriers to developing, updating, implementing and evaluating local HRH and
- Identify and prioritize the regional support necessary for assisting local jurisdictions with successfully developing, updating, implementing and evaluating local HRH plans; to the extent feasible, document commitments among participating partners.

Three groups were invited to participate: 1) Chief Executives in Health from the USAPI – a mix of PIHOA Board Members and Associate Board Members, 2) PIHOA Affiliate Members, and 3) select regional Community College executives and staff.

Anticipated outcomes included:

- A clearer understanding of barriers to HRH implementation locally,
- A compendium of strategies that local leadership might use to address these barriers;
- A description of regional support and infrastructure necessary for local success; this will take the form of recommendations for donors, colleges, health agencies, regional association and other stakeholders;
- Identification of the top regional actions that participants will undertake to support local HRH;
- A summary statement and overview of meeting outcomes.

Pre-meeting documents were used to support the work of meeting participants. These documents included eight completed or draft country / jurisdiction HRH strategic plans to date, WHO Action Framework references, and other regional HRH-related papers. A key document – *PIHOA Human Resources for Health Planning Project - Interim Regional Summary, October 2009*[25], extensively quoted above, summarized to date PIHOA's work begun in 2007 supporting local HRH Planning. This document was emailed to invite meeting participants before the meeting.

The final proceedings and recommendations of the Regional HRH Planning Meeting will be used to 1) help guide HRH development in the region; 2) assist PIHOA and member health agencies to negotiate with donor and technical assistance agencies to advance the region's HRH planning activities and solutions; and 3) provide an HRH road map for partners over the next two-years.

Over three days the design of the Regional HRH Meeting provided ample time for

1. Up-to-date HRH presentations by
    - 10 Jurisdiction Health Ministries/Departments,
    - 4 Regional Institutions of Higher Learning,
    - 3 Regional Associations, and
    - a distance presentation by the WHO Pacific HRH Alliance;
2. A meta-analysis of five of the six HRH Country Completion Reports;
3. Breakout Group discussions and recommendations from
    - PIHOA Executives,
    - Jurisdiction HRH Focal Points,
    - Regional Institutions of Higher Learning, and
    - Regional Associations.

Table 5 lists the eighteen HRH presentations that are included in Appendices A,B,C,&D. The Country HRH Completion Reports Meta-analysis is included in **Table 4**. The Breakout Group recommendations are listed in **Tables 6 through 9**.

Table 5*: Regional HRH Planning Meeting Presentations in Appendices A,B,C,D.*

Appendix A. Jurisdiction Health Ministries/Departments HRH Presentations 1. American Samoa Department of Health 2. CNMI Department of Public Health 3. National Government - FSM Department of Health & Social Affairs 4. Chuuk State Department of Health Services 5. Kosrae State Department of Health Services 6. Pohnpei State Department of Health Services 7. Yap State Department of Health Services 8. RMI Ministry of Health & Environment 9. ROP Ministry of Health 10. Guam Department of Health & Social Services
Appendix B. Regional Institutions of Higher Learning HRH Presentations 1. College of Micronesia-FSM 2. College of Marshall Islands 3. Northern Marianas College 4. University of Guam – School of Nursing
Appendix C. Regional Associations HRH Presentations 1. Pacific Island Primary Care Association 2. Pacific Basin Dental Association 3. Pacific Chronic Disease Coalition
Appendix D. International Health Organization 1. WHO Pacific HRH Alliance

Because of a bomb scare at the meeting hotel on the final afternoon of meeting, at the order of the Governor of Guam, the meeting ended abruptly and, for safety reasons, participants lodged at the meeting hotel site were quickly moved to another hotel. In spite of the untimely interruption, all the meeting objectives were met.

C. Overview of Jurisdiction/Country Presentations

PIHOA Board Members or their designees briefed meeting participants on their current HRH challenges, activities, and solutions. These briefings provided the jurisdictions an opportunity to review local HRH plans and reports published as far back as 23 months (FSM), 19 months (RMI), and 16 months (CNMI) prior to the HRH Planning Meeting on October 2009.

Within the ten **Jurisdiction Health Ministries/Departments Presentations**, there were about 700 information points presented by the PIHOA Board Members or their representatives regarding Ministry/Department HRH challenges and activities in their respective jurisdictions. There were understandably common themes and differences among the jurisdictions which themselves are diverse in geographic distribution, language and culture, political relationships and sovereignty, and development of their economic, health, and education sectors.

The Educational Pipeline and Training Challenges: The country presentations again underscored in many jurisdictions the absolute shortage of select health workers (nurses, allied health workers, physicians, dentists, dental nurses, mental health workers) as well as the fact that the educational pipeline was failing to produce students prepared to enter or succeed in science-based health careers programs either on or off-island. Because of students' general weakness in mathematics and science, many high school students either were not interested in pursuing health careers and/or avoided opportunities to join the local health workforce. In spite of these challenges, there was consensus for the need for local accredited training in health careers.

Some jurisdictions complained of difficulty in getting their students accepted into medical and dental schools or any off-island health careers schools because of their students' lack of preparation in mathematics and science. For example, one jurisdiction observed that the students that were sent to the Fiji School of Medicine programs were assessed to be at least two years behind in their studies when compared to their FSMed peers from other Pacific Islands.

Bridging programs for MOH/DOH staff: Additionally, the country presentations acknowledged that of the current health workforce, many are undertrained having been informally trained through local on-the-job non-accredited training programs. An inventory in one country pointed out there were few health workers on staff with Bachelor's Degrees and even fewer with Masters Degrees. Face-to-face and distance learning courses were addressed both positively and negatively: one country complained that too few MOH/DOH staff were completing the face-to-face

courses; in another country, staff were having difficulties with on-line courses. The WHO POHLN courses for one country were a success and in another jurisdiction a challenge for staff to complete. One jurisdiction stated that on-line distance learning was a benefit but "slow" due to the narrow Internet pipeline.

Leadership and HR Management: The presentations also listed weak leadership and administrative skills, cumbersome management systems, low salaries and few benefits, poor job satisfaction, ineffective recruitment and retention, and the lack of organized/effective staff development, and weak training and continuing education mechanisms within their ministries and departments. The importance of leadership was stressed: it needed to be constant, realistic, have the capacity to align systems and mobilize resources to address HRH issues, and it was seen as key that the Ministers and Directors of Health be directly involved in the process. One jurisdiction stressed that leadership was essential especially in the face of a disasters.

Policy: In the area of policy, it was acknowledged in one country that policies and procedures in HRH were being driven by the requirement of U.S. federal programs. Also there was the recommendation that policies and procedures be data driven, that an "environmental approach" be initiated for the formulation of HRH development, and minimal personnel requirements be determined sufficient to get the work of the MOH/DOH done. Almost across the board there was no coherent HRH plan being implemented, few HRH officers or individual champions identified to move the HRH agenda forward, and little political will to make HRH plans succeed. It was recommended that the jurisdictions learn of each other's HRH challenges, share best practices, explore training opportunities within the region, phase out informal on-the-job training, and develop the necessary advocacy, social marketing, and the political will to drive HRH changes forward. To that end, it was recommended that PIHOA visit each of the jurisdictions to promote and strengthen both the local and regional political will for HRH development.

Finance: Some of the presentations underscored the need for HRH funding to be secure, sustained, and part of the national budget. It was also recommended that there be a policy review to include work incentives, bonus options, and housing incentives as well as providing scholarships for students training on island.

Nursing and Allied Health: In the country presentations there was almost total unanimity regarding the chronic shortage of nurses and the lack of specialty nurses (ICU nurses, nurse practitioners, nurse midwives) contributed to by too few prepared students, the lack of nursing faculty at the local nursing schools, low nursing salaries, centralized nursing programs not serving all islands, and lack of

administrative support in one country for local LPNs trying to advance themselves to RNs at the local community college nursing program. Also a common theme was the shortage of allied health workers and community health workers and/or the need to have these workers upgraded in skills and for the community health workers to be better supported in the field by doctors and nurses.

Regional best practices: Some bright lights in different jurisdictions included the development of an interagency approach to HRH development, successful training programs in training Health Assistants and the slow but steady progression in upgrading LPNs in formal RN-level community college courses, a soon to be implemented Nursing Academy at one of the local high schools, the development of a Future Health Careers Summer Course for high school students, and a College of Health concept created by one MOH to organize and manage both credited and non-accredited training for their MOH staff.

Overview and Recommendations of Breakout Sessions

Four groups participated in breakout sessions:

- PIHOA Health Executives,
- Designated HRH Focal Points,
- Select PIHOA Affiliate Members, and Regional Community College and University of Guam executives and academic staff.

The objective was to have the Breakout groups return and present to the plenary body recommendations on how to move forward.

Group 1: Chief Executives: PIHOA Health Executives included the ROP Minister of Health (PIHOA President), the RMI Secretary of Health, the FSM Assistant Secretary of Health (arrived late due to weather related delays), the Directors of Health of American Samoa and Guam, the FSM Health Directors of the Chuuk, Yap, and Pohnpei States Health Services, the Deputy Director of Health from Kosrae State Health Services, an HRH Officer from the CNMI representing the Secretary of Health, and select executive staff. The meeting was facilitated by the PIHOA Executive Director. **Table 6** summarizes their recommendations.

Table 6: *PIHOA Health Executive Breakout Recommendations*

PIHOA Health Executive Breakout Recommendations

• As a priority, develop and implement practical HRH plans
• At national and state levels, mandate HRH Offices in each Health Department
  o Provide political will
  o Be institutionalized
  o Be adequately funded
• PIHOA to organize and conduct reverse advocacy program
  o Staff and membership to meet political leaders of each jurisdiction to promote HRH in a timely fashion
• Permanent HRH Focal Points to be recognized and trained in practical HRH skills
  o PIHOA to request technical assistance from WHO Pacific HRH Alliance for guidance in ongoing practical training

Group 2: HRH Focal Points: The Local and National HRH Focal Points' Breakout included ten representatives - the national and state representatives from all six-PIHOA countries / jurisdictions and the four-FSM States. This Breakout group was facilitated by the PIHOA Regional HRH Coordinator. **Table 7** summarizes the major themes from this group.

To provide some guidance to HRH Focal Point Breakout session, the ten designated HRH Focal Points (FPs) or their representatives were posed three questions:

- Would do you need in place so you can effectively do your part for HRH development in your position?
- What other kinds of support do you need from other groups (bosses; donors)? and
- What will you do to help the other groups do their job?

Their observations and recommendations were the following: The designated FPs observed that HRH Offices in all of the PIHOA areas were either non-existent or underdeveloped. In those areas where there was a formal HRH process, those acting as formal or informal HRH Officers also juggled other major responsibilities so that HRH activities were diluted or the process ad hoc. None of the designated HRH Focal Points had any formal training other than on-the-job training in managing HRH for their respective countries. Executive leadership to support HRH Offices and Officers was variable from non-existent to moderate (except strong in American Samoa). The two recommendations were:

- Human Resource (HR) Systems needed strengthening in order to support the HRH agenda and
- A practical hands on HRH 101 training process be made available as soon as possible with ongoing technical assistance to strengthen HRH Officers abilities to do their job.

Table 7: *Jurisdiction HRH Focal Point Breakout Recommendations*

Jurisdiction HRH Focal Point Observations / Recommendations
Observations: • HRH Offices in all of the PIHOA areas were either non-existent or underdeveloped • Where there was a formal HRH process, those acting as HRH Officers also juggled other major responsibilities so that HRH activities were diluted or ad hoc, • None of the designated HRH Focal Points had any formal training other than on-the-job training in managing HRH for their respective countries, • Executive leadership to support HRH Offices and Officers was variable from non-existent to moderate (except strong in American Samoa), • Human Resource (HR) Systems needed strengthening in order to support the HRH agenda Recommendation: • Human Resources (HR) Systems needed to be strengthened to support HRH agenda • An HRH 101 training process be made available as soon as possible with ongoing technical assistance to strengthen HRH Officers abilities to do their job.

Group 3: PIHOA Affiliates: Select PIHOA Affiliates invited to the meeting were divided into two Breakout Groups:

- **Group 3-A:** Regional Institutions of Higher Learning affiliates to PIHOA through the Pacific Postsecondary Education Council and
- **Group 3-B:** Regional Health Associations.

PIHOA staff facilitated each of the Breakout Groups. **Table 8** summarizes the observations and recommendations for the Regional Institutions of Higher Learning and **Table 9** the Recommendations for the Regional Health Associations.

Group 3-A: Regional Institutions of Higher Learning: Select regional academic institutions included representatives from the University of Guam (UOG), Guam Community College (GCC), College of the Northern Marianas, College of Micronesia-FSM (COM-FSM), College of the Marshall Islands (CMI), the University of Hawaii at Manoa (UHM) - all Pacific Postsecondary Education Council member institutions- and was facilitated by a PIHOA consultant staff. As academics they provided the most comprehensive list of observations and recommendations which were consistent with PIHOA's Nahlap HRH Action Plan to strengthen and develop

"partnerships with local institutions for higher learning for delivery of needed accredited curricula" and recommended departing from the all too prevalent informal process of on-the–job training. **Table 8** contains their recommendations.

The academics from the Community Colleges and the Universities of Guam and Hawaii at Manoa comprised of nursing educators and public health and science lecturers. They presented their main recommendation with advice to the MOHs/DOHs and PIHOA.

Recommendation: The academics strongly recommended that a Strategic HRH Educational plan be developed and implemented. Furthermore the planning process should include a number of priority actions comprising of a needs assessment process with the generation of relevant data including information on the types and numbers of health workers needed, discussion on recruitment of qualified students and faculty, addressing distance education capacity and the technology to support it, focusing on continuing education issues, facilitating of accreditation of education programs, discussing regional inter-institution articulation issues including sharing of program curricula, and developing a plan to identify and capture resources to move the HRH agenda forward.

The academics were generous with their advice to the MOHs/DOHs: Ministries must firmly link employment to knowledge and academic qualifications. On scholarships they advised that scholarship funds be used for both on-island and off-island health careers training and that scholarship recipients be required to provide employment payback for their respective jurisdiction health sectors. The MOHs/DOHs were advised to review salary structures with view to pay raises and collaborate with local agencies to implement courses to include work release programs to make it easier for workers to formally upgrade their skills. Local Departments of Public Health and Labor were advised to support foundation programs in nursing and public health though the colleges. At the decision making levels the academics advised the MOHs/DOHs to involve nurses and nurse educators at the table when discussing HRH education policy. And there were two pleas:

- Please communicate with the local colleges BEFORE bringing in outside programs… support homegrown capacity! and
- "If you ask for special programs, *fill our classes."*

The academics also targeted PIHOA for advice**:** PIHOA must not miss the opportunity to facilitate coordination among current efforts of the regional nursing programs (CNMI, COM-FSM, the PCC program in Yap State, PCC in Palau, and GCC) and take advantage of UOG's

strong presence in nursing. PIHOA was further advised to spearhead training in health strategic planning and health services management in all jurisdictions through the regional Community Colleges, UOG, and the MOHs/DOHs.

Table 8: *Regional Institutions of Higher Learning Breakout Recommendations*

Regional Institutions of Higher Learning Breakout Observations and Recommendations

Recommendations:
• Development of a regional strategic plan for HRH education to include
  o Generation of relevant data
  o Recruitment of qualified students and faculty
  o Needs assessment
  o Continuing education
  o Distance education capacity
  o Articulation
  o Functioning and communication across distances
  o Sharing curricula for programs
  o Facilitation of accreditation of education programs

The following was determined as needed to act on these priorities: • Information re: types and numbers of workers needed • Plans for resources • Ministries must firmly link employment to knowledge & academic qualifications • Ministries should collaborate with agencies to implement the courses: work release, recruitment of students, mentors • "If you ask for special programs, *fill our classes."* • Provide training facilities and preceptors.
The Community College Breakout sent a clear message to the Ministries and Departments of Health: • Require employment payback for scholarships, • Please review salary structure- pay raises, • Involve nurses and nurse educators at the policy table when discussing HRH education policy, • Use govt. scholarship funds for BOTH on-island and off-island education, • Require public health and Dept. of Labor donors to support foundation programs in nursing and public health though the colleges, • Please communicate with the local colleges BEFORE bringing in outside programs… support homegrown capacity!

PIHOA was also targeted for advice:
• PIHOA must not miss the opportunity to facilitate coordination among current efforts in nursing:
  o CNMI , COM-FSM "revived" nursing program,
  o Yap State Nurse training efforts,
  o Palau RN Program,
  o GCC enhanced programs,

- Take advantage of UOG's strong presence in nursing
- PIHOA should spearhead training in health strategic planning and health services management in all jurisdictions through:
  - Community Colleges
  - UOG
  - DOH/MOH

Group 3-B: Regional Health Associations: The Associations included Professional Organization and regional coalitions:

- Pacific Basin Medical Association - PBMA,
- Pacific Basin Dental Association -PBDA
- American Pacific Nursing Leadership Conference - APNLC
- Pacific Islands Primary Care Association - PIPCA
- The Cancer Council of the Pacific Islands -CCPI represented by the John A Burns School of Medicine Department of Family Medicine and Community Health, and
- One non-PIHOA Affiliate – the Pacific Chronic Disease Coalition - PCDC, which is applying for PIHOA Affiliate Status.

Recommendations:

The Regional Health Organizations, with the lead of the Pacific Basin Dental Organization, made recommendations regarding the development of the proposed and as yet unfunded mid- level Oral Health Practitioners Training Program (OHPTP) planned for Pohnpei State Health Services Dental Unit and COM-FSM. The group recommended that that the program be split into a non-accredited hands-on Coral Health Clinical Training component and an accredited Oral Public Health track within the Associate of Sciences Degree Program in Public Health at the COM-FSM. The group further recommended to strengthen and develop community–based education regarding chronic disease. To increase the voice and effectiveness of the regional Professional Health Associations agreed to form a professional "hui" (a working group) to serve as a platform for further networking to move forward the chronic disease training agenda by telephone and face-to-face meetings when possible.

Table 9: *Regional Health Associations' Observations and Recommendations*

Regional Health Associations' Recommendations
Recommendations: • Re-define the model of the proposed mid-level oral health practitioner program being planned for the College of Micronesia – FSM, • Work to strengthen and develop community –based education regarding chronic disease, and • Agreed to form a professional "hui" (a working group) to serve as a platform for further networking to move forward the chronic disease training agenda by telephone and face-to-face meetings when possible.

Section 5: Summary of PIHOA Regional HRH Planning Meeting Outcomes and Recommendations

As explained by past WHO Director General Lee, the solutions to address HRH issues are not straight forward, and there is no clear consensus on how to proceed. This is so among U.S.-Associated Pacific islands where solutions are complex and involve many diverse participants, cultures, and health systems in an area larger than the continental United States. From the twenty-two formal HRH presentations delivered by the Chief Health Executives and their staff, by the regional academic community, by HRH Focal Points, by Regional Health Associations, by WHO PHRHA, and by PIHOA staff and consultants, there emanated hundreds of observations and recommendations regarding USAPI HRH challenges and solutions. These observations and recommendations are reflected in the **Tables 1-9** and in **Appendices I-V**.

Although the meeting ended abruptly because of the bomb threat without the time or opportunity for a tidy closure, the recommendations coming from the Chief Executives Breakout session were achieved by consensus and are straight forward – they are practical and doable first steps to address the regional and local HRH challenges which are complex with many moving parts. The Chief Executive recommendations come from **Table 6** and are the following:

1. **Development of HRH Offices and HRH Processes:** It was clear from all parties that in order to develop and implement practical HRH plans, as a priority, each of the jurisdictions, both at the national and state levels, need to mandate HRH Offices in each of the Health Departments that, through political will, be institutionalized and adequately funded. Once these offices are in place, the next-step recommendations / solutions will follow.

   To carry this recommendation out, it was also recommended that PIHOA organize and conduct a reverse advocacy program whereby PIHOA staff and its membership meet with the political leaders of each of the jurisdictions to promote the implementation of HRH Offices, the selection of HRH Officers, and the initiation of coherent and collaborative HRH planning in a timely fashion.

2. **Identify, support and train HRH Focal Points:** To drive the HRH agenda, HRH Focal Points need to be quickly identified and appropriately trained in

practical HRH skills. PIHOA will request for technical assistance from the Pacific HRH Alliance for guidance for ongoing practical training.

From the Breakout groups—HRH Focal Points, Institutions of Higher Learning, and the Regional Professional Health Associations—came the following recommendations, which have been generalized:

- Strengthen government Personnel Management Systems, both within health agencies and within the broader government civil service systems; among other things, advocate for formally linking employment to knowledge and academic qualifications.
- Review personnel policies and procedures to address low salaries, equitable and just compensation rates, and flexible strategies (i.e. work release time), in order to create incentives for health workers to attend formal training programs to upgrade skills.
- Make practical hands-on "HRH 101" training available to health agencies as soon as possible, along with a package of ongoing technical assistance to strengthen the ability of HRH officers to do their job effectively, including relevant training in health-specific workforce issues and general personnel system requirements.
- Encourage the education sector to develop a Regional Strategic HRH Educational and Resources Plan, which will identify and implement needed health careers training programs.
- Advocate for scholarship reform, including supporting on-island health careers training and creating pay-back employment requires for scholarship recipients.
- Develop and strengthen foundation training programs among the regional colleges and community colleges, in nursing, public health, health services management, and allied health. This must include providing financial resources to assist with recruiting students and providing adjunct faculty, mentors and preceptors.
- Support the coordination of HRH development across agencies and sectors; for example, support Guam as it develops a non-governmental organization for HRH development and coordination.

Clearly, many of these recommendations and those proposed in the nine Country Reports, the multi-sectoral HRH Planning Meeting presentations above, and the meta-analysis of Country Reports will not be accomplished unless there is the leadership and political will to develop the mechanism in each of the jurisdictions to organize and drive the HRH agenda forward. The recommendations by the Chief Executives above provide the framework for that mechanism.

HRH Planning Next Steps: The following are immediate next steps:

- Before PIHOA's 48th Regional Meeting in American Samoa (29-30 March and 21 April 2010) the draft Regional HRH Plan will be forwarded to meeting participants for their review and comment. The Final Draft will then be reviewed for ratification by the PIHOA Board at the 48th Meeting.

- At subsequent PIHOA Meetings the PIHOA Secretariat will provide an Action Plan to implement the above recommendations and other recommendations from the Country Reports Goals, the multi-sectorial HRH Planning Meeting Presentations, and the Meta-analysis of the Country Reports and address the needed strategic and tactical activities to move the recommendations forward to include:
  - An Advocacy Plan to national and state governments to develop and strengthen the political will to implement the above HRH recommendations;
  - A framework to finding resources to train and support HRH Officers;
  - A plan to work with the regional educational community, both K through12 and the Community Colleges, and with Pacific Rim educational institutions to develop practical, affordable, and doable health careers training plan and programs, and
  - A strategy to work with donor agencies to develop collaborative activities to leverage ideas and funding to drive forward local and regional HRH solutions.

For the well-being of our patients, families, communities, and our health workforce, especially in light of PIHOA's new overarching priority to lessen the burden of disease and suffering caused by NCDs, PIHOA will work with its Board and partners to address regional and local HRH shortages and address the need to upgrade the current health workforce – our precious human capital investment - to transform experience and knowledge into action for health. For after all, in the end, "It is people, not just vaccines and medicines, who prevent disease and deliver curative health services".

Section 6: Endnotes

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Section 7: List of Figures and Tables

Section 8: Glossary

AS	American Samoa
ASCC	American Samoa Community College
CAL-PAC	University of California Berkeley's HRSA-funded Public Health Training Center – PIHOA is a collaborative partner
CMI	College of the Marshall Islands
CNMI	Commonwealth of the Northern Mariana Islands
CPD	Continuing Professional Development
FAS	Freely Associated States (FSM, RMI, ROR)
FSM	Federated States of Micronesia
FSMed	Fiji School of Medicine
GCC	Guam Community College
GDPH&SS	Guam Department of Health & Social Services
JABSOM	John A. Burns School of Medicine, University of Hawaii
MCES	Micronesian Chief Executives Summit
NMC	Northern Marianas College
PBL	Problem Based Learning
PHRHA	WHO's Pacific Human Resources for Health Alliance
PIHOA	Pacific Island Health Officers Association
RMI	Republic of the Marshall Islands
ROR	Republic of Palau
SDSU	San Diego State University
UAA	University of Alaska at Anchorage
UCLA	University of California at Las Angeles
UHH	University of Hawaii at Hilo
UHM	University of Hawaii at Manoa
UOG	University of Guam
USAPI	U.S.-Affiliated Pacific islands