

Palau Assessment for Continuing Health Care Professional Development Program

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Abstract

In 2003, the University of Hawai'i Department of Family Medicine and Community Health entered a four-year cooperative agreement with the U.S. Health Resources and Services Administration to establish the "Pacific Association for Clinical Training" (PACT). PACT's goal is to develop effective distance education methods to improve the education and skills of health care professionals in the U.S. affiliated Pacific Island Nations. To determine the situation existing in 2004, one of PACT's first projects was to perform site visits to each jurisdiction, conducting needs assessments through interviews with key health care professionals, hospital administrators and government officials. This article highlights findings of PACT's Palau assessment. Meant to establish a baseline for future reference, all data was collected in 2004-2005 and has not been updated.

Key words:

Palau; Clinical Training; Workforce Development; Distance Education. (PHD 2007 Vol 14 No 1 Pages 57 - 65)

The Republic of Palau (also known as Belau), the westernmost archipelago of the Carolines, is a chain of more than 340 islands, of which eight are permanently inhabited. Palau, in the same time zone as Japan, is 500 miles equidistant from the Philippines to the north and Papua New Guinea to the south, 800 miles from Guam, 1,900 miles from Tokyo, and 4,450 miles from Honolulu. Palau has a land mass of 189 square miles (of which one island, Babeldaob, is 128 square miles), surrounded by an exclusive economic zone of ocean extending over 237,000 square miles.

Introduction

This report was compiled from written surveys of key health administrators and personnel in conjunction with interviews during a site visit performed by Drs. Tai-Ho Chen and Gregory G. Maskarinec of the Department of Family Medicine and Community Health, University of Hawai'i John A. Burns School of Medicine (UH JABSOM) in May 2004. Dr. Maskarinec added observations from a September 2004 site visit while in Palau on a separate project. Additional information was obtained through ongoing communications with Pacific Association for Clinical Training (PACT) partners in Palau. Discussion at the November 2004 PACT Advisory Board meeting provided additional information on recent activities. The report has been reviewed by the two PACT Advisory Board members for Palau, Drs. Dever and Kuartei, who as co-authors of this assessment provided additional revisions in 2005.

Following 200 years of colonial history, including three decades under U.S. administration as part of the United Nations Trust Territory of the Pacific, Palau chose independence from the U.S. in 1978, as well as separate political status from the Federated States of Micronesia. A Compact of Free Association with the U.S. was approved in 1986, but not ratified until 1993. The Compact provides Palau with up to \$700 million in U.S. aid over 15 years in return for permitting military facilities and alliance with the U.S. for a period of 50 years.^a

Census and Demographics

Palau's total population (2006 estimate) is 20,579 of whom 70% are ethnically Palauan (Micronesian with Malayan and Melanesian admixtures). Asians (mainly Filipinos, but also Chinese, Taiwanese, and Vietnamese) comprise another 28% of the population and 2% are

Caucasian. Palau's official languages are Palauan (64.7%) and English (9.4%); Sonsoralese-Tobian is spoken in the Southwest Islands. Palau's literacy rate is 92%.

Most of the population lives on the three island complex of Koror, Meyuns, and Malakal, with a combined land area of 7.1 square miles. Most remote are the southwest islands, 180 miles from Koror which include Sonsorol, with a population of 60. Sonsorol can only be accessed by ocean vessel, a trip that takes about 18 hours from Koror reported by the Director of Belau National Hospital to cost approximately U.S. \$7,000 per round trip. During an epidemic of scrub typhus from August 2003 through January 2004^b medical evacuations from Sonsorol created a significant burden on the Sonsoral state health budget.

Health Care and Health Statistics

Palau has two private medical clinics and an 80 bed public hospital, the Belau National Hospital, in Koror. The number of patients admitted to Belau National Hospital in 2001 was 3,436.

Four community health centers, known as "super dispensaries" provide urgent care and preventive services, are located in Ngarchelong, Ngeremlenegui, Melekeok and Peleliu. Five smaller community clinics are located in outer villages and islands.

In 2001, 300 live births and 138 deaths were recorded^c. The crude birth rate in 2000 was 14.5 per 1,000 people; the crude death rate was 6.5 per 1,000. Life expectancy is 67.26 years for men, and 73.77 years for women (2006 estimates). In 2004, Palau's per capita Gross Domestic Product (GDP) was U.S. \$9,000.^d The World Health Organization (WHO) reported the 2003 total health expenditure per capita was U.S. \$607 (9.7% of GDP).^e As WHO noted, this high health expenditure per capita demonstrates the advantages of a high level of foreign assistance and a small population. Quality of life appears to be better in Palau than in many other Pacific Island countries, but as a result, the prevalence of modern lifestyle-related diseases is increasing. There has been an average of five youth suicides per year in Palau over the past several years.^f

In 2002, a total of 33 cancer related referrals were made to two off-island facilities, Tripler Army Medical Hospital in Honolulu and St. Luke's Medical Center in the Philippines.^g In 2005, the 140 off-island referrals (most of which were from preventable diseases) along with treatment for 28 hemodialysis patients, according

to the hospital director, accounted for a significant share of Palau's total national health care costs.

Health Workforce Demographics

In 2004, the Republic of Palau had a total of 25 physicians, 19 employed by the Ministry of Health (MOH) and 6 private practitioners. Palau's MOH employs approximately 400 persons. Belau National Hospital is staffed by 24 physicians (an increase from 20 in 1998), one medex (medical extension officer with two years of pre-doctoral training), 56 clinical nurses, 54 public health nurses, 12 nurse aids (divided between the wards and Public Health), nine pharmacy staff (plus one studying in Fiji for a PharmD degree), 11 laboratory technicians, five physical therapists, seven radiology technicians, four dentists, 10 dental workers, and three social workers.

Health Workforce Training Laboratory Services

Of the 62 allied health workforce positions, four are expatriates and four are Palauans (all eight are certified in their respective fields). The remaining 54 allied health workers received on-the-job training by senior allied health personnel. Locally,

allied health salaries range from U.S. \$6,000 to \$8,000 annually.

Radiology Services

Of the seven radiology technicians, two are certified. One, a Palauan, is a computed tomography technician who trained in the U.S. and the other is a New Zealand-trained ultrasound technician.

Pharmacy Services

The head of pharmacy at Belau National Hospital is from Kiribati and was trained and certified in New Zealand. A pharmacy technician training program began in 2004 conjunction with the University of Hawai'i, Hilo and the University of Alaska, with eight participants in the first class.

Physical Therapy Services

In the 1980s, a U.S. Department of Energy grant provided training for all physical therapists in the Pacific region; however, none received subsequent formal training.

Bureau of Public Health, Ministry of Health

It is important to note the critical services provided by Palau's Bureau of Public Health. Programs in Emergency Health, Community Advocacy, Social and Spiritual Health, and Health Information Systems are provided through the Bureau's four Divisions.

Most of the population lives on the three island complex of Koror, Meyuns, and Malakal, with a combined land area of 7.1 square miles

Division of Environmental Health

Palau's environmental health (EH) workforce includes two Master of Public Health (MPH)-level personnel, one undergraduate diploma-recipient from Fiji School of Medicine (FSM), one certificate-level recipient from FSM, 14 EH personnel undergoing on-the-job training, and four students. By 2005, nearly all of Palau's EH personnel are expected to be studying for undergraduate certification and/or diploma through the Palau Area Health Education Center (AHEC)/Fiji School of Public Health and Primary Care (FSM/SPH&PC).

Division of Behavioral Health

Twenty-eight to 30 staff personnel in the Behavioral Health (BH) Division provide inpatient and outpatient mental health services, tobacco and substance abuse education and prevention programs, substance abuse treatment services, as well as day group programs to assist severely ill BH patients with participation in community activities.

Division of Oral Health

Four dentists (two expatriates and two locals trained in Fiji) provide oral health services in Palau. Of Palau's 10 current dental assistants, eight completed a year-long training program. The only dental school in the region is the Fiji School of Oral Health (SOH). Palau has sent four students to Fiji SOH, two completed their dental training.

Division of Primary and Preventive Health

The Division of Primary and Preventive Health provides an array of services in five general categories: infectious diseases, non-communicable diseases, cancer, family health, and community health.

Division of Nursing, Belau National Hospital

Although Palauans prefer to stay in the Pacific, many of Palau's nurses have moved to Guam or Saipan (capital of the Commonwealth of Northern Mariana Islands [CNMI]), since they are able to earn four times their salary there compared to Palau. As of 2004, Palau had lost 30 nurses to Guam and Saipan, and a number of Palau's Chamorro nurses have moved to the U.S. mainland.

The Training Pipeline

Pipeline programs to develop new health staff are a priority in Palau. In 2005, the Palau AHEC, based at Palau Community College (PCC), conducted a nine-month "Nursing Assistant and Allied Health Training Program" with WHO and Work Incentive Act funding

support. This program was successful in addressing the low completion rate of students in existing educational channels for health careers. The program recruited 40 local students who were paid stipends and rotated through various health specialties. Of the 28 graduates, Palau's MOH either hired or mainstreamed selected graduates to PCC for further nursing training. There is interest within the Palau MOH to further develop Palau's health careers pipeline (elementary school, high school, community college, graduate programs) and bridging programs (targeting under-trained health professionals) to provide a clearer pathway for progression into the health workforce. To affect this, the MOH will partner with the Ministry of Education, the Palau AHEC, and local non-governmental organizations, and will join the UH JABSOM's Health Careers Opportunity Program competitive renewal application.

Integration of primary and continuing training into ongoing health services activities was recommended as a possible model to meet the specific needs identified in Palau

Current Professional Development Activities

The importance of developing a coherent health services plan first in order to effectively direct human resources training priorities was emphasized by co-authors Dr. Stevenson Kuartei (Director, MOH Bureau of Public Health) and Dr. Gregory Dever (Director, MOH Bureau of Hospital and Clinical Services) at the November 2004 PACT Advisory Board meeting.

Integration of primary and continuing training into ongoing health services activities was recommended as a possible model to meet the specific needs identified in Palau.

Continuing Professional Education

Palau has the most active continuing medical education (CME) efforts in the region, most of which are conducted through Palau AHEC and under the Hospital's Division of Professional Services. The physician CME requirement is 50 credits per year (weekly attendance logs are kept at local medical conferences), while 30 hours of annual continuing education units (CEUs) are required by the MOH for all nurses. Currently, no continuing education standards are set for Palau's social workers.

Ongoing continuing education programs through Palau MOH/AHEC include medical laboratory technician training with daily "hands-on-training" and more formal training modules which will be opened to the region. As an example, in April 2004 the MOH conducted a two-week pilot program on blood safety which was attended by laboratory technicians from Yap and Pohnpei (the Federated States of Micronesia). This program was conducted by an expatriate laboratory trainer recruited

through the Pacific Paramedical Training Center in Wellington, New Zealand and was funded by the U.S. Department of Health and Human Services (DHHS) Health Resources and Services Administration (HRSA) Hospital Preparedness Program.

Undergraduate and Postgraduate Training

Between its inception in 2002 and the time of the PACT assessment in 2004, the Palau AHEC has conducted 39 formal undergraduate and/or postgraduate certificate/diploma courses, including 9 postgraduate courses in general practice taught by the University of Auckland's Faculty of Medicine, and 30 undergraduate/postgraduate courses taught by FSM/SPH&PC faculty. The relationship with the FSM has been very positive in providing instruction that can lead to formal certifications and diplomas for Palau's health workforce trainees.

By November 2004, the Palau AHEC had coordinated the training of over 130 regional physicians, nurses, health administrators and EH workers, primarily from Palau, and also including Yap State, and the Republic of the Marshall Islands. In August 2004, one physician and 11 nurses comprised the inaugural cohort of program graduates. In 2004, the Palau AHEC expected to award certificates to 13 local nurses in undergraduate training in Public Health (midway towards receipt of a diploma in the British system). The next graduating class in 2005 was expected to number over 50 graduates.

Included as a component of the FSM/SPH&PC postgraduate training for physicians was an extensive community health project to determine local health indicators, in which all 5,500 households in Palau were interviewed to ascertain community health needs and problems. Additionally, six Palauan physicians completed a 12-month Clinical Residency Training program at Belau National Hospital, conducted by the Palau AHEC. There is also an ongoing emergency response program conducted with the University of Auckland.

Although PCC has a nursing program, few students from the community enroll directly into the program. The majority of students are first recruited into a public health position and later transfer to the MOH, from where they are offered part-time salary support while they attend PCC's nursing program. This approach has proven more successful than past efforts in which Palauan students were sent directly to the FSM because many failed to

complete training due to insufficient development of English, math and other academic skills.

Training Opportunities through the Palau Ministry of Health

The following is a list of continuing education and other training opportunities conducted by staff of the MOH Division of BH:

- a) Basic counseling strategies for employees of Palau's Ministries of Health, Education, and Justice (nurses, social workers, case managers). This training includes three 1.5 hour seminars (two parts didactic, one part hands-on) with group breakout sessions.
- b) Critical incident management.
- c) CMEs/CEUs on integrating mental health care into the broader medical system, including issues related to the intersection of diabetes and anxiety, diabetes and depression, and mental health and substance abuse; concurrent disorders, hypertension, and post-cerebrovascular accident personality changes.
- d) Training for school Parent-Teacher Associations on the prevention and/or early intervention of student behavioral problems that may hint of an emerging behavioral illness. Programs included the creation of a monitoring system in conjunction with Head Start programs to encourage appropriate classroom behaviors and identify students with learning disabilities or at potential risk of illness.
- e) Case management and patient care coordination techniques utilizing social work skills.
- f) Differential diagnosis of psychosis and different modalities of therapy.
- g) Rapid substance abuse and addiction interventions for dispensary nurses, medical officers, physicians, health educators and triage nurses in the Outpatient and Emergency Departments.
- h) Handling mentally ill patients in terms of degrees of aggression and violent behavior.
- i) Crisis response training, suicide risk assessment, prevention and intervention as well as treatment after attempted suicide.
- j) Addiction counseling training and certification (14 trainees completed the course, 7 received International Red Cross certification).
- k) Crisis counseling training as part of an Emergency Management Plan (22 volunteer crisis counselors have been certified).

Priority Continuing Professional Development Needs

By November 2004, the Palau AHEC had coordinated the training of over 130 regional physicians, nurses, health administrators and EH workers, primarily from Palau, and also including Yap State, and the Republic of the Marshall Islands

Targeting education based on leading causes of mortality is one approach to developing a relevant continuing education curriculum. In 2003, the MOH reported the ten leading causes of death in Palau to be: 1) cancer (n=22); 2) injuries (n=20); 3) heart disease (n=18); 4) cerebrovascular accident or stroke (n=15); 5) diabetes (n=11) and kidney disease (n=11); 6) septicemia (n=10); 7) chronic obstructive pulmonary disease (n=7); 8) natural causes, unknown (n=5); 9) congenital anomalies (n=4); and 10) cirrhosis/liver disease/alcohol abuse (n=3).^h As the number of deaths of for this single-year period totaled only 127 ranking by cause has little if any significance. However, the list provides some indication of those topics for which further medical education would be helpful. Common risk factors and determinants of health should also be addressed in any training curriculum.

Priority Future Training Opportunities

Recent continuing training programs in Palau have focused on physicians, nurses and a subset of allied health staff, but minimally on administration and supportive services. This has been acknowledged through needs assessments conducted in the areas of physiotherapy, radiology, laboratory and clinical nursing. Training of current administrative and allied health staff through bridging programs remains an area of high priority in Palau since the vast majority of administrative and allied health staff have had no baseline formal training in their fields.

Additional training in health promotion, risk reduction, and culturally-based social services has been requested, particularly for Community Advocacy personnel, who conduct health research, social marketing, health promotions and health education programs. Key geriatrics training needs identified include; program organization, management, clinical skills for nurses, and psychosocial aspects relating to end-of-life care.

As is true throughout the Pacific, there is a critical need to train service chiefs in management skills since many were elevated from clinical positions with limited or no training and experience in administration and leadership.

Palau's MOH has identified two local experts, Benita H. Decherong, Certified Substance Abuse Counselor, Ministry of Education Counselor, and Josepha "Seba" Tiobech, RN, MOH Behavioral Health Nurse Supervisor,

to advise on cultural diversity issues as part of the training curriculum.

Story-based teaching may be better received than a strict didactic approach. As one source noted "We've had CEUs on communication and management, but getting people to apply what they know is still really hard. A case-based, practical approach to team building across different professions is what is needed."

Potential Collaboration

The success of the Palau AHEC is a strong model for training programs in the region. Critical support from MOH for human resources development has enabled the strong efforts of this program to be successful in Palau. Through ongoing Palau AHEC courses offered in the region, coupled with the implementation of new AHEC programs in Yap and CNMI in recent years, the benefits of this model is now more widely available to other parts of the region. The notable success of the Nursing Assistant and Allied Health Training Program in recruiting, supporting and developing new healthcare personnel has provided a model for meeting Palau's allied health and clinical nursing needs.

The success of the Palau AHEC in working with the FSM suggests that further discussion of partnerships with this institution may prove to be extremely valuable. The expertise and experience of health staff on Palau is a valuable resource for the U.S. Associated Pacific Islands (USAPI). An appropriate role for PACT may be in helping to make this expertise more available to other countries in the region.

Distance Education Technologies

Satellite communications through Pan-Pacific Education and Communication Experiments by Satellite (PEACESAT) are tenuous, since Palau falls at the edge of the satellite footprint and has had inconsistent results from this technologyⁱ. PEACESAT facilities are located in the Department of Education. Two dedicated lines for teleconferencing are available in the library and conference room. Palau has only one local Internet Service Provider. The experience of medical staff with the Tripler Army Medical Center's online consultation program has been very positive. The Honorable Victor M. Yano, M.D (appointed by President Tommy E. Remengesau as Palau's Minister of Health in January 1995) is a U.S.-trained private practice physician and founder of the Belau Medical Clinic. In his private

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medical practice, Dr. Yano has successfully accessed Tripler's medical rounds using net-to-phone technology, at a cost of U.S. \$2.50 per hour, however he points out the need to train technicians to repair and maintain the medical equipment. Moreover, the U.S. military has mandated increased security measures making recent access difficult.

A relatively economical (U.S. \$18 per hour per line) phone bridging service provided by Verizon Hawai'i provided greater clarity and reliability than PEACESAT for audio-conferencing but this service was discontinued in 2004. The cost of long-distance service has recently dropped in Palau. The Palau AHEC experience with distance education through audio-conferencing has been generally positive when reliable and affordable telecommunications have been available. For sensitive topics, such as discussion of psychosocial issues, face-to-face interactions may still be preferred.

In 2003, the WHO installed a 10-station Pacific Open Learning Health Network computer lab in the Belau National Hospital library. This remains underutilized and there is limited access to commercial health information sources such as printed journals. Health professionals agree that internet and other computer-based distance learning courses, such as via CD-ROMs, could work well.

Pharmacy Services personnel have requested computerization of the prescription system to provide for automatic warnings of possible adverse drug interaction or prescription errors. They noted that the state hospital in Yap is currently using a computerized pharmacy warning program.

Additional details on communications and information technology infrastructure are provided in the PACT Technology and Telecommunications Infrastructure Assessment article in this issue.¹

Limitations

The most serious limitation of this study was its failure to include the four super-dispensaries or any of the outer island community clinics of Palau during the site visit, despite their importance to the health of Palau and the needs of their staff for continuing education. Additionally, with our focus on continuing education needs, no analysis was attempted to determine the ideal number or composition of health professionals needed to maintain and improve health care services in Palau at

present or in the future.

Since we relied on many key informant interviews, the assessment is limited where respondents may have shown inconsistency in ranking or prioritizing the content areas or specific challenges. This occurred for several reasons; varied exposure or access to the different types of information, varied educational backgrounds and varied job duties. However, all interviewed personnel uniformly agreed that additional training was essential for better health care. Data is based on official records as well as first-hand reports in some cases there were discrepancies resolved in favor of the version provided by the Minister of Health.

Finally, the health worker training situation in Palau is exceptionally dynamic and was evolving even as the site visits progressed. This assessment does describe a baseline of health worker education for comparison and measurement of subsequent progress. This report was used to guide initial PACT policy with continual discussion and development of PACT activities through ongoing collaboration with partners in Palau.

The success of the Palau AHEC is a strong model for healthcare workforce training programs in the region. Strong, systematic support from the MOH for human resources development has enabled the program's success in Palau

Summary

Of all Freely Associated States of the USAPI, Palau has the highest per capita health care expenditure and has the most active CME efforts. However, despite Palau's relatively high standard of living compared to most of the Pacific, Palauans have high rates of life-style associated diseases such as illicit drug use, alcohol, and tobacco consumption. Mental health problems and domestic violence are also serious issues.

Although satellite communications through PEACESAT are tenuous, Palau's healthcare workforce shows considerable computer aptitude and a willingness to explore new modalities of learning, suggesting that internet or CD-ROM based distance learning programs have good chances for success, especially given that computer resources at Belau's National Hospital are easily accessible and reliable.

The success of the Palau AHEC is a strong model for healthcare workforce training programs in the region. Strong, systematic support from the MOH for human resources development has enabled the program's success in Palau. Through ongoing Palau AHEC courses offered in the region and with implementation of new AHEC programs in Yap and CNMI in recent years,

the benefits of this model is now more readily available to other parts of the Pacific. The notable success of the Nursing Assistant and Allied Health Training Program in recruiting, supporting and developing new healthcare personnel also provides a model for meeting Palau's allied health and clinical nursing needs.

Given the sophistication and success of ongoing continuing medical training activities in Palau, PACT should provide continued support for targeted local and regional AHEC programs, such as supplementing health information resources and grant research support, as requested by AHEC staff. The expertise and experience of the healthcare workforce in Palau is a valuable resource for the region. PACT could play an effective role in making such expertise available throughout the USAPI.

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References

- a Hezel, F. X. *The New Shape of Old Island Cultures*. 2001. Honolulu: University of Hawaii Press.
- b Durand, A. Mark, Stevenson Kuartei, Ishmael Togamae, Maireng Sengebau, Linda Demma, William Nicholson, and Michael O'Leary. *Scrub Typhus in the Republic of Palau, Micronesia*. *Emerging Infectious Diseases*. October 2004. <http://www.cdc.gov/ncidod/EID/vol10no10/04-0288.htm>
- c Pacific Island Health Officers Association (PIHOA) *Health Data Matrix* (2001).
- d World Factbook: Palau [homepage on the Internet]. <http://www.cia.gov/cia/publications/factbook/rankorder/2004rank.html>
- e World Health Organization: *Country: Palau* [homepage on the Internet]. Geneva, Switzerland: World Health Organization; c2006 [cited 2006 Jul 17]. <http://www.who.int/countries/plw/en/>.
- f Hezel, Francis X. *Suicide in the Micronesian Family*. <http://www.micsem.org/pubs/articles/suicide/frames/suifamilyfr.htm>
- g Wong, Vanessa, Cheryl Taoka, Stevenson Kuartei, Yorah Demei, and Francisca Soaladaob. *Cancer in the Republic of Palau*. *Pacific Health Dialog* 11.2 (September 2004).
- h Ministry of Health Epidemiology, Palau MOH 2004-2005 [PowerPoint slide presentation, slide 11 of 20]. Koror, Republic of Palau; c.2004-2005 [cited 2006 Jul 17]. <http://www.palau.gov.net/minhealth/publichealth/hlthinfosys/hlthinfosysdocs/deathtrnds.htm>.
- i Durand, A. Mark. *Training and Coordination for Pacific Island Health Services: the problem of distance and the Peacesat Program*. *Pacific Health Dialog* 12.1 (2005): 171-172.
- j PACT Technology and Telecommunications Infrastructure Assessment. University of Hawai'i Telecommunication and Information Policy Group (TIPG)/ Pan-Pacific Education and Communication Experiments by Satellite (PEACESAT) Program. This issue of *Pacific Health Dialog*.