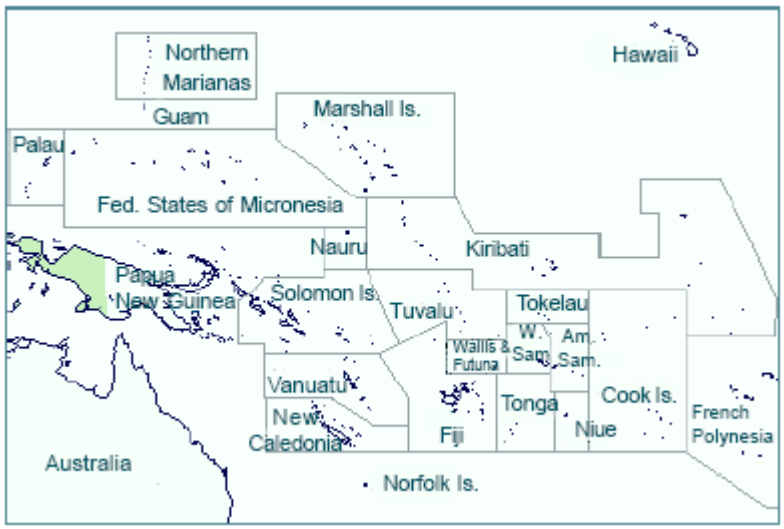
Connecting Pacific Islands to Specialty Care

By Houkje Ross

Closing the Gap, Pacific Islander Health • June/July 2000

Residents of the U.S.-associated Pacific jurisdictions live on 104 islands covering an area larger than the continental U.S. Health professionals are in short supply. Hospital care often requires travel by plane or boat. Patients needing specialty care may be referred as far away as the Philippines or Hawaii. In American Samoa, 30 percent of the total health budget is devoted to off-island referrals. It is no wonder that Pacific jurisdictions are vitally interested in the promise of telemedicine and telehealth.

Medical and health care practices enhanced by the use of telecommunications and computer technologies—including digital cameras, video and audio transmission, and the Internet—can help link physicians in the Pacific jurisdictions to colleagues in Hawaii. They can also link health care workers on outlying islands to the hospital or health department in their own country or territory.



In an effort to use this technology to bring medical information, services and care to the region, the Health Resources and Services Administration (HRSA) launched the Pacific Basin Telehealth Initiative in 1999. The Republic of Palau and American Samoa are now testing two types of technology provided through HRSA's Office of the Advancement of Telehealth (OAT).

Testing New Telemedicine Possibilities

The Initiative chose America Samoa to test interactive teleconferencing equipment, which allows health care workers to see a specialist in Hawaii or elsewhere through a live video screen. "A wheelchair was ordered for a child on the Island, but by the time it arrived he had grown, so the chair had to be adjusted," said Cathy Wasem, director of Telemedicine-Telehealth Programs at OAT. "There was no one on the island who knew how to adjust the chair." Teleconferencing equipment allowed health care workers to see how a specialist in Hawaii was adjusting the wheelchair. "It was done on the spot," she said.

Most islands in the region have a shortage of health care professionals like nurses, pharmacists, radiologists, and laboratory technicians, according to Institute of Medicine's report, *Pacific Partnerships for Health.*

Using telemedicine can save time, money, and lives. It can even be used in cases of emergencies. "For example, it can be used to stabilize a patient enough to be able to move him or her to a place that can provide the next level of care," said Wasem.

The second type of telemedicine being tested is store-and-forward technology, which captures audio or video clips of medical information and sends them to physicians off-island. Store-and-forward technology can be used to send medical images like X-rays, MRIs, or CAT scans to radiologists and other off-island specialists. Each jurisdiction has this type of technology provided by the Akamai project at Tripler Army Medical Center/PRPO. The HRSA initiative is hoping it can be used in new ways.

Traditionally the technology has connected physicians at the local hospital with specialists located at tertiary care centers. In Palau, the store-and-forward technologies are being piloted at the super-dispensaries, linking them to the republic's hospital and main clinic. In American Samoa, the interactive technologies are connecting the hospital with dispensaries on two outer islands—usually staffed with licensed nurse practitioners and emergency medical technicians. "This will enable 'front-line' health care workers to access the next level of care," said Wasem.

"In the future, we hope to be able to connect health care workers at dispensaries and other outlying clinics to continuing education classes and seminars," she added. Because there are no medical schools located in the jurisdictions, health care workers miss out on these opportunities. "Those involved in the Telemedicine Initiative in American Samoa are becoming excited about the educational possibilities," said Wasem. OAT also plans to develop Listservs for information sharing over the Internet.

The Initiative is also pulling together an inventory of existing telecommunication and telehealth resources in the region. A regional telehealth consortium, staffed by the University of Guam, is coordinating the inventory and expects to have it completed in 6–12 months. HRSA will also work with other federal agencies operating in the area to coordinate telehealth activities.

For more information on HRSA's Telehealth Initiative, contact Cathy Wasem, HRSA, (301) 443-0202. ❖