

网 Medical School Hotline

Experiencing Life as a Rural Health Professional

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he shortage of health professionals in rural areas of the United States is a longstanding and growing problem. But how are students encouraged to establish their careers in medically underserved rural areas of Hawai'i?

The Quentin Burdick Rural Health Interdisciplinary Program (QB) is an approach to solving this problem. The QB program is designed to encourage students majoring in a health profession to consider working in a rural or underserved area of Hawai'i upon graduation. As part of their training, selected first year students in medicine, and students nearing graduation in medical technology, nursing, psychology, and social work receive academic instruction over a five-month pre-practicum period prior to living and working for six-weeks in one of six neighbor island communities. In addition, high school students are recruited into the program from the local community. The practicum provides the high school students with leadership opportunities while encouraging them to attend college and major in a health profession as well as to assist the QB team members with their projects. At the completion of the practicum, the QB teams each submit a written report about their practicum activities and present their work to the local community. The QB program culminates in a daylong forum in August on the University of Hawai'i at Manoa (UH Manoa) campus. Guests include university faculty and administrators, community members and state and federal government representatives. At the suggestion of a State Senator, students from the Department of Education have been recently added to the multidisciplinary teams. Since its inception in 2000, 74 students have participated in Quentin Burdick Rural Health Interdisciplinary Program. The communities that have hosted the QB student teams are Honoka'a and Pāhoa on the Big Island, Waimea and Lihue/Hanalei on Kaua'i, and the islands of Maui and Moloka'i.

The rural health teams are made up of three to five students from the disciplines listed above, a UH-Manoa faculty member, and a community-based site coordinator. During the practicum, the teams have three specific objectives to meet. First, each member of the team shadows a health professional in his or her discipline once a week. This shadowing experience is an excellent opportunity for the students to explore what it is like to work in their community. Second, the team must develop and complete at least one community-based project. These projects are a useful mechanism for the students to learn about the numerous cultural and social aspects of the community and to meet individuals and families living in the community. Finally, the student teams explore opportunities for community based research projects. By completing this objective, students become acutely aware of the problems that face their community. The following are examples of the experiences and projects

from the 2003 Quentin Burdick Rural Health Interdisciplinary Program.

Honoka'a is a community on the northern side of the Big Island. The community has undergone dramatic changes due to the closing of the sugar plantation. The 2003 Honoka'a Team included a medical student, a student in education and a nursing student. They entitled their experience "Caring for the Mind and Body." The team was sponsored by the Hamakua Health Center. Participation with the Hamakua Asthma Camp and the Hamakua Youth Center provided the team members with the opportunity to work with children and adolescents. As health educators, the team gave presentations to the asthmatic children on how to control their condition. As role models, the team spoke to the participants about careers in the health field and how each team member is working towards their career choice. The team also worked with the Diabetes Education Program, the Diabetes Awareness Education and Screening Project, and the Labman Mobile Project to develop a booklet entitled "Diabetic Foot Care" for the patients of the Health Center. As a legacy project the students helped to update the clinic's Diabetes Registry Report. This database allows the clinic's staff to check quickly for pertinent information concerning their diabetic patients. Every Wednesday, the team members shadowed a person from the clinic in his or her profession. Within two weeks they were seeing a few of the same patients on their follow-up visit. The students felt their participation at the Hamakua Health Center was extremely important towards their efforts to become involved with the community.

The town of **Pāhoa** on the Big Island is known for its cultural diversity. It is located in the Puna District about 20 miles southeast of Hilo. The Bay Clinic in Hilo sponsored the Pāhoa team that worked most closely with the Pāhoa Family Health Center. The student team consisted of a first year medical student, a Food Science and Human Nutrition student, a nursing student, and a high school student. The theme of the team's experience was "Taking Healthy Steps Into the Future." Through discussions with community and clinic members, the team discovered that diabetes and nutrition were community concerns. The team created educational presentations and a booklet entitled "Healthy Habits" to educate Summer Fun children on healthy food choices and foods that can be purchased with a limited income. Their second large project involved the "Keiki Slippah Drive." The team learned from a fourth grade teacher that many children go to school barefoot because their parents are unable to provide footwear for them. Without footwear these elementary school students could not participate in school sponsored field trips or eat in the school's cafeteria. The Pāhoa team created public service announcements, fliers and collection centers for new and used slippers. Over 100 pairs of new slippers and more than 50 pairs of used slippers, sandals and

shoes were collected. Donations came from community members and local businesses. The 2003 Pāhoa team felt that both activities were successful and addressed the needs of the children in Pahoa in financially and culturally sensitive ways.

The county of Maui was the team's community. The 2003 Maui team included of a Masters of Social Work student, two first year medical students and a Masters of Nursing student. The first week of their experience was dedicated to shadowing a health professional in their field at the Community Clinic of Maui. The students observed the interdependence and interrelationship of the various health care disciplines as they worked together for the best treatment of their clients. The remainder of their practicum was spent with the Department of Health on Maui where the students learned that surface water supply of upcountry Maui was presumed to be leaching lead into the drinking water. In June 2001, the Calgon product, C9, was added to the water supply in an attempt to control the corrosion by creating a protective film. Soon after the addition of C9 into the water supply, the Health Department began to receive reports of health problems from the community. In conjunction with the Department of Health staff, the QB team conducted a case-control study to determine if there was a link between the additive and health problems. Their study indicated that there was a statistically significant group of affected people in upcountry Maui, who had experienced symptoms, such as eye irritations, skin rash and breathing problems, as compared to the downtown area. The team presented their results at a community forum in the town of Makawao. The QB team's preliminary findings have been used to design more definitive studies.

Nana's House, a family development center of the Child Protective Services, hosted the 2003 Waimea team on the west side of Kaua'i. The team consisted of a social work student, a nursing student and two first-year medical students. In addition, eight high school students were recruited as junior leaders. The community of Waimea was concerned about the lack of summer activities for intermediate school age children (11-14 years old). The community understood this to be a vulnerable age group where peer teaching and appropriate role models could influence positively the rising number of teen pregnancies and drug and alcohol abuse. The team developed a curriculum for the Summer Health Program at Nana's House where prevention education could be taught. The activities included cultural values, tobacco prevention and cessation, career choices, team building, and physical fitness. In addition to the daily planned activities, the team surveyed the Summer Health Program participants about the future needs and direction of the program. Their recommendation to the community included the development of a career-shadowing program to encourage post-secondary education goals while helping the teenagers to give back to their community by volunteering in public and private organizations, schools, churches, and businesses. The team felt this approach would lead to a deeper connection between the adolescents and the community as well as sustaining the possibilities of developing leadership skills for the youth on the west side of Kaua'i.

The QB team on the east side of **Kaua'i** divided their time between the Summer Health Academy in **Lihue** and the Halele'a Cultural Exploration Program in **Hanalei**. The team consisted of a psychology student, a nursing student, and a medical student. Funded through tuition, fees and grants from both S.W. Wilcox Trust and Na Lei Wili AHEC, the Hanalei program was started in 1996 to provide

a summer enrichment program focusing on Hawaiian culture and values for children 4 to 15 years old. The Summer Health Academy located at Kauai Community College (KCC) was funded by Na Lei Wili AHEC and promoted health career opportunities for children 11 to 15 years old. The Health Academy Program expanded this year to included students from the island of Ni'ihau. The team provided age appropriate presentations on water and sun safety, personal hygiene with emphasis on developmental changes occurring during puberty, development of positive self-esteem, making responsible choices, and nutrition. The highlight of the summer was a banquet prepared by the Summer Health Academy students with oversight by the KCC culinary staff that demonstrated their newly acquired nutritional knowledge and culinary skills. The QB team concluded that their participation in the Halele'a Cultural Exploration Program and the Summer Health Academy reinforced the importance and necessity of summer enrichment programs for Kaua'i's youth and the need to encourage adolescents to seek post-secondary educational opportunities with specific career goals.

Moloka'i is an island rich in natural and human resources. These assets were a source of inspiration for the 2003 QB Moloka'i team. The team was made up of a nursing student, a first year medical student, an education student, and a psychology student. The team worked closely with Lama Lama Ka'ili, a local nonprofit health organization advocating healthy life-style changes. The team focused on a community project on healthy living, especially diet and exercise. Most importantly, the team emphasized that good health means taking care of one's body, mind and soul. The team drew upon the community's sense of ohana and malama for each other. They developed a health book entitled "Flava of Moloka'i." The book included Moloka'i's own recipes incorporating vegetables as much as possible, as well as healthy tips from community members. The tips included information on local agriculture, fishing, la'au lapa'au (herbal medicine), pictures of Moloka'i's keiki (children), words of wisdom from the kupuna (elders) and a cultural-exercise map listing several hiking routes and their description. The team presented their book at a community forum. Each member of the team talked about the book from his or her health field perspective. The team appreciated the many positive comments received from the community following their presentation.

It is too early to conclude what affect the Quentin Burdick Program has had on the selection of specialties by medical students. However, as of November 2003, of the seventeen students who have graduated from their respective programs, nine (three nurses, two nurse practitioners, three social workers and one psychologist) have found work in rural or underserved areas. In addition, one social worker and one public health graduate work in jobs with statewide responsibilities that include rural health.

The success of the Quentin Burdick Program is directly related to the dedicated faculty and community-based site coordinators who provided guidance during the year-long experience, the twenty-two student participants who showed enthusiasm, creativity, and professionalism, and the communities and their health centers through their sponsorship and support of the student teams. Contact Dr. Jan Shoultz (shoultz@hawaii.edu), Principal Investigator, for information about the Quentin Burdick Rural Health Interdisciplinary Program. This project is supported by funds from the Bureau of Health Professions, Health Resources and Services Administration, Department of Health and Human Services under grant #D35HP16002.