Health Education Needs in Hawaii: Social Work, Dental Hygiene and Nursing

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Abstract
In this article, the need for selected health education programs in Hawaii will be discussed. Changes in the health care system, population and provider population impacting supply are identified. Health trends in Hawaii are highlighted and strategies needed to assure that Hawaii’s demand for health professionals in social work, dental hygiene and nursing are suggested.

Introduction
Health trends, current and projected health care system changes, population and provider factors, and supply and demand issues driving the need for education of selected health professionals in the State will be discussed in this article. In addition, the difficulties associated with recruiting qualified health professionals are presented. Economic leverage and research and service contributions are offered as strategies undertaken by the University of Hawaii at Manoa School of Nursing to address workforce supply and demand issues.

Social Work
The School of Social Work at the University of Hawaii at Manoa has the only MSW and PhD programs in social work in the Pacific. It also has the largest B.S. program. Social work is among the fastest growing profession for the next ten years and the School provides graduates to meet this need. These graduates are educated to understand the specific concerns and values of Hawaii’s multicultural population. They are prepared for the workforce needs of the State, for example in child welfare, mental health, and services to older people.

In addition, the School is a leader nationally in producing research on Asian Americans and Pacific Islanders. The research generates knowledge needed to develop policies and programs within our State. The School brings in an annual amount larger than its general fund budget in training and research funds. The MSW program is ranked 29th out of 150 by US News.¹

Dental Hygiene
Statistics indicate a continued need to provide oral health care, prevention and education services to the people of the State of Hawaii. The Department of Health reports that on screening of 70,000 public school children, the dental health of Hawaii’s school children is poor and among the worst in the nation. Some ethnic groups and island communities in Hawaii have disproportionately high rates of dental disease. Ninety-four percent of 6-year-olds nationally are caries-free compared to 18% of 6-year-olds in Hawaii. Five percent of mainland 5-year olds have “baby bottle tooth decay” compared to 15% of 5-year-olds in Hawaii. The highest rates of this type of tooth decay are among Native Hawaiians (21%), Filipinos (32%) and residents of Molokai (33%).

Several areas of the neighbor islands are designated as “dentally underserved.” In 1992, 71% of dentists surveyed indicated there was a shortage of dental hygienists in the State. A large percentage of dental offices have no dental hygienist due to the chronic low supply of hygienists. Hygienists are needed on the neighbor islands and Oahu.

The Dental Hygiene program at University of Hawaii at Manoa is the only dental hygiene education program in the State of Hawaii. The program parallels the entry-level educational goal (baccalaureate) of the national professional organization, the American Dental Hygienists’ Association. The program is accredited by the American Dental Association and 100% of graduates pass National and State Board Dental Hygiene Examinations on their first attempt. The program ranks 47 of 212 or in the top 25% of national performance ranking by the National Board of Dental Hygiene Examiners. This program is attended primarily by women who are often heads of households and have a need to access educational opportunities on island.

The Program also operates a clinic that provides low-cost oral care as well as dental health education to students and residents (elementary schools, skilled nursing facilities, community rehabilitation programs, Special Olympics, etc.) of Hawaii. Casts are also made for University of Hawaii athletes in order to fabricate their mouthguards. Career education is also provided at various high schools and University of Hawaii affiliates to recruit students from diverse backgrounds.

Nursing
In order to meet the health care needs of the citizens of the State of Hawaii, adequate numbers of nurses are essential. Demographic and educational characteristics of nurses in the nation and Hawaii have an influence on the supply of practicing nurses as well as the supply of nursing faculty. This section describes these characteristics and addresses the approach used by the University of Hawaii School of Nursing to address these issues.

Demand
Despite a wave of managed care changes such as mergers, consolidations, and briefer lengths of stay that saw hospitals trim their ranks of inpatient RNs by 6% between 1992-1996, the number of employed RNs nationwide grew by its highest annual rate ever — an average of more than 3% a year, to 2.1 million in the same period, according to the latest figures from the Division of Nursing, U.S. Department of Health and Human Services.² Even as many hospitals cut their inpatient RN staff, nursing employment boomed in other hospital areas between 1992 and 1996, up 25% in outpatient and labor and delivery units, up more than 15% in emergency rooms, and rising nearly 10% in surgical facilities, federal figures show. In the same period, the number of RNs in community health centers rose 42%, nearly triple the growth in the previous four years, and climbed by 32% in long term care facilities.²

The increased hiring of RNs has spurred multiple factors including: (1) the mounting health care needs of increased numbers of elderly; (2) a growing population of hospitalized patients who are older, more acutely ill, and in need of more skilled RNs per patient; (3) the rapid expansion of front-line primary care to many sites throughout the community; and (4) technological advances requiring more highly skilled nursing care. A related factor in hiring trends is the aging of RNs. In 1996, the average age of RNs in the U.S. was...
44, up from 40 in 1980. Only nine percent of RNs were under 30 years of age. In 1997, the mean age of RNs in Hawaii was 44.9. Since high levels of retirement are projected in the next 10-15 years for the majority of the RN workforce, the significance of preparing replacements for them in the face of increasing demand is staggering.

Federal figures project that if current trends continue rising, demand will outstrip the supply of RNs beginning approximately 2010. By 2015, says the Federal Division of Nursing, 114,000 jobs for full-time equivalent RNs are expected to go unfilled nationwide. Presently, in an expanding number of markets, hospitals and other employers are struggling to meet an increasing need for RN care and have stepped up recruitment.

Supply

The majority of RNs in the U.S. hold associate degrees or diplomas in nursing. Although 31% of RNs in the United States in 1996 held baccalaureate degrees (41% in Hawaii), 32% held two-year associate degrees (31% in Hawaii), 27% held diplomas (18% in Hawaii), 9% had a master of science in nursing (10% in Hawaii), and fewer than 1% had obtained the doctoral degree (less than 1% in Hawaii as well). This disproportionate supply of nurses with associate degrees and hospital diplomas has led many policymakers to call for the closure of significant numbers of these programs in favor of accelerated production of baccalaureate and graduate prepared nurses. The National Advisory Council on Nurse Education and Practice, an advisory panel to the federal Division of Nursing, has recommended, as a policy target, that at least two-thirds of the basic nurse workforce hold a B.S. or higher degree by 2010. A recent report by the Pew Health Professions Commission (1995) urged the closing of up to 20% of associate degree and hospital diploma programs and more concentrated production of nurses from baccalaureate and graduate programs. The nurse supply in Hawaii is described in Figure 1. A steady decline over the past five years can be noted.

The health care system’s complexity requires nurses who (1) are capable of more independent clinical decision making in less structured environments, (2) are prepared broadly in basic as well as behavioral and social sciences and management, (3) can communicate effectively, and (4) are oriented more to health promotion, maintenance, and cost-effective coordinated care. The B.S. in nursing curriculum provides such preparation, including education and training in community based primary care, not typically a part of associate degree or diploma programs, and gives nurses a foundation to enter graduate education for advanced practice and management roles.

At increasing numbers of health systems nationwide, B.S. prepared nurses are practicing in ways that recognize their different educational preparation and competencies from other entry-level RNs. In these differentiated practice models, B.S. nurses not only provide more complex types of patient care but also design and coordinate a comprehensive plan of care for the entire length of a patient’s stay—from pre-admission to post-discharge, supervise nurses aides and other unlicensed assistive personnel, design teaching plans for patients, and collaborate with physicians, family members, and other hospital departments and research staff. Associate degree prepared nurses function primarily at the bedside in less complex situations and provide additional care such as teaching patients how to maintain care after discharge.

Faculty Shortage

Faculty recruitment problems are emerging nationally and in Hawaii. As the demand for nurses increases, the professors simply will not be there to educate the workforce on which the state and nation depend. We are facing serious barriers to attracting the faculty we need.

Tight budgets have allowed only modest increases in nursing faculty earnings. Full-time nursing professors at four-year colleges and universities earned $66,132 in the 1998-99 academic year, up 2.7% over 1997-98. The salary of a middle range full professor at the University of Hawaii is $64,872. Average salaries for UH Manoa Nursing faculty are $35,160 for instructors, $41,768 for assistant professors, $58,186 for associate professors, and $74,300 for professors. According to College and University Personnel Committees, assistant and associate level faculty pay tallied fairly evenly with other disciplines while full professors trailed, especially at private institutions. This makes recruitment very difficult in light of the fact that cost of living in Hawaii is about 30% more.

The American Association of Colleges of Nursing reports many faculty are opting for early retirement packages or resigning for greener clinical or administrative positions. Some schools are supplementing faculty practice plans or share salaries throughout appointments with clinical agencies.

In 1998, 411 people graduated from doctoral programs in nursing. Only 43% had an employment commitment to serve as nursing school faculty. Seventeen percent accepted non-academic positions. Filling faculty posts has become a problem. Many candidates do not have a program of research defined or they lack teaching skills. Others know research is the name of the game and do not want to teach.

Faculty life presents a harder road than private practice or administration. Clinical faculty in particular have long arduous working
hours. Increased patient acuity has decreased the number of nursing students that can be safely accommodated in a clinical setting. Faculty may be responsible for 10-14 patients as well as their 8 - 10 students in a complex clinical area.

Quality and accreditation requires faculty have at least a degree higher than their students. The new PhD in Nursing Program, now funded by the Division of Nursing, is a substantive, coordinated effort to increase the number of doctorally prepared nurses who also are prepared for an academic career.

**Strategies Used by the University of Hawaii School of Nursing**

**Economic Leverage**
The School of Nursing has generated more than $2.4 million in research and training grants. The amount of extramural funds generated by the School have increased by more than 600% over the past three years. All graduates get jobs and pay taxes supporting the economy of the State. Most graduates remain in the state. Nurses in primary care roles have demonstrated the ability to achieve quality primary care outcomes at lower cost. Advanced practice nurses are the least expensive primary care provider to educate.

**Research Contribution**
Nurses in PhD programs are the only health discipline specifically educated to do clinical research with human subjects. Nurses have the potential to develop evidence-based practices and reduce waste in the delivery system. Nurses also monitor quality of health care services.

**Service Contribution**
Numerous activities occur within the School of Nursing that provide service to the community. Health outreach education is provided for example through Dr. Wang’s clinic in China Town for diabetic patients. Care is also provided for the elderly through special programs, clinics and partnerships. Complementary care is offered through the Healing Center at the School of Nursing. Community-based education is the basis of the curriculum and all students learn within community sites addressing the needs of the diverse population in the State. Diabetes management is provided through numerous service and research projects. Dr. Kadokira has a leadership role in the American Association of Diabetes Educators. Faculty also serve as Pro Bono primary care providers in community health centers. Faculty and students provide health education for students and the community. Health screening is also provided for children through the Keiki Gold project. All levels of programs are delivered using distance delivery methods to neighbor islands. Faculty are funded through the Community Initiative on Nursing to conduct nursing workforce analysis and forecasting studies for the entire State.

**Conclusion**
Numerous challenges remain to assure that the State’s demand for social work, dental hygiene, and nursing professionals is met. As health care needs of our residents and health care systems change, it is imperative that the State’s educational systems are ready to meet the challenge. Economic resources are well invested in these programs which assure health and safety of the public and maintain our quality of life.

**References**

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**Why We Need Laws to Protect Patients from Their Health Plan**

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The Hawaii Coalition for Health knows that members of the health industry are continuously interacting with members of the Legislature, building good will, and putting forth their views of what the world of regulation should or should not include. Unfortunately, few on the consumer side have the resources or bodies to put forth such time and effort, and most of what we do in the Hawaii Coalition for Health is either unpaid or poorly paid. We are essentially volunteers. Furthermore, while we share wide agreement with health care providers about the problems of managed care, our loyalty is to the health care consumer and not to the physician. The vast majority of our members are patients, not professionals, and the dues of these ordinary people are negligible. They, however, are the Legislature’s primary constituents.

Here is why patient-protective legislation is important:

1. Several years ago, the Legislative Reference Bureau studied the status of Hawaii’s health care system and reported that competition was healthy. Unfortunately, the situation has changed dramatically since then. Today, competition is not working in Hawaii to provide the best choices of health insurance for health care consumers. For all practical purposes, the competition that does exist is only between HMSA and Kaiser, and it manifests itself in efforts by HMSA to reduce the “bottom line” in order to reduce premiums to employers. If HMSA is successful in this competition, it could force Kaiser out of business. Then HMSA will really have a monopoly of health care business as well as a “monopsony” - the only buyer of providers’ services left in Hawaii — and HMSA will