

UNIVERSITY OF HAWAI'I SYSTEM ANNUAL REPORT



REPORT TO THE 2010 LEGISLATURE

ANNUAL REPORT FROM THE
MEDICAL EDUCATION COUNCIL

HRS 304A-1704 (Act 181, SLH 2003)

November 2009

Hawai'i Medical Education Council

Report to the 2010 Legislature

Executive Summary

Hawai'i is facing a rapidly developing, severe shortage of physicians. Current estimates of the supply of physicians indicate that Hawai'i is well below the demand predicted by a national model of physician workforce assessment. In fact preliminary estimates are that Hawai'i is more than 500 physicians short of what is needed, and the physicians are not distributed to maximally meet the needs of Hawai'i residents. In addition, Hawai'i's physicians are older than the national average and roughly 40% are expected to reach retirement age (age 65) by 2020. Several other factors will dramatically increase demand for health care services. A demand model developed by the Lewin Group that has been utilized by the U.S. Health Resources & Services Administration (HRSA) incorporates factors such as population growth, the aging of the population, generational and gender differences in practices. University of Hawai'i at Mānoa, John A. Burns School of Medicine (JABSOM) faculty applied this model to estimate future demand for physicians in Hawai'i. Over the next 20 years, Hawai'i will need an additional 1000 physicians beyond current levels to maintain current levels of services.

As a result, Hawai'i will need to graduate or recruit a total of 150 physicians per year to maintain current ratios. Closing the gap between Hawai'i and national norms by the year 2020 would require over 200 new physicians per year. JABSOM classes are currently at 62 students per year. Approximately 90 new physicians begin practice in Hawai'i each year. Half of these have JABSOM ties (medical school or Hawai'i Residency Program (HRP)). The rest are recruited from outside of the state. These new demand projections suggest that we will need to improve overall recruitment by at least 60 physicians per year. Increasing the number of medical trainees in Hawai'i is possible and a 40% increase in both JABSOM and residency training positions would likely result in an additional 30 practice-ready physicians with Hawai'i ties per year starting in 2018. The rest of the gap will need to be filled through improved recruitment and retention, new models of care (a combination of episodic and medical home models), and interdisciplinary teams that include physicians nurses, pharmacists, physicians assistants, and other health professions.

Based on preliminary data collection, shortages are expected to be most severe in primary care, cardiology, gastroenterology, orthopedics, general surgery and other medical and surgical subspecialties. Hawai'i has training programs in only four of these areas currently. Unless we create training opportunities for these specialties here in Hawai'i, we will need to compete for physicians with the mainland where shortages will also be severe, perhaps as high as 150,000 physicians. Specific recommendations are provided along with the timeline to acquisition of a practice-ready physician.

Council Assignment

In 2003, Act 181 created the Hawai'i Medical Education Council in an effort to secure additional national and state funds to develop graduate medical education. Specifically, the Council was tasked to identify physician workforce shortages and develop a statewide plan for meeting workforce needs. Although the original funding mechanism proposed never materialized, the Council has continued to meet to discuss workforce issues. This year, data collected by JABSOM faculty began shedding light on the growing severity of the workforce shortages.

compared to national norms, but Hawai'i is starting out at already lean levels when one considers the great demand for replacement physicians on the horizon.

The HRSA projection model for physician demand estimates that Hawai'i will need approximately 1000 physicians more by the year 2030. This new information means that we will need 50 new physicians per year in order to maintain current levels of service.

This finding is aggravated by the research group's finding that 40% of the practicing non-military physicians in Hawai'i are 54 years of age or older. If this group retires at age 65, they will need to be replaced creating an additional recruitment burden of 100+ physicians per year.

Information gathered regarding incoming physicians suggests that currently, between 50 and 90 physicians begin practice in Hawai'i each year. Half of these (45) have gone to medical school or residency at JABSOM. Hawai'i Residency Program (HRP) data shows that 80% of JABSOM students that stay in Hawai'i for residency training also begin their practice post-residency in Hawai'i.

Given that retirement and demand will require at least 150 new physicians per year to keep us at current service levels, and we are currently adding (through training or recruitment) 90 physicians per year, if nothing is done, the physician shortage that currently exists may double during the next 10 years. This trend will continue as "baby boomers" hit their 70's – 80's in the years between 2020 and 2030.

Specialty Care Projections

Shortages will be particularly severe in primary care, cardiology, gastroenterology, orthopedics, general surgery and other medical and surgical subspecialties. Hawai'i has training programs in only four of these areas currently. Unless we create training opportunities for these specialties here in Hawai'i, we will need to compete for physicians with the mainland where there will also be a severe shortage in 2030, perhaps as high as 150,000 physicians.

The specialty of cardiology provides an extreme example of the challenges ahead. Preliminary estimates are that we need at least 40 cardiologists to meet the current demand, and twice that in the year 2020. Currently, Hawai'i has no cardiology fellowship. Queens Medical Center recently submitted a request for such a program but, if successful, it will graduate 1 fellow each year beginning in 2012. Thus, at this pace, we will generate 8 cardiologists during this decade, some of whom may not stay in Hawai'i.

Conclusions

A severe physician shortage will occur over the next 20 years. Immediate attention is required to blunt the negative impact of this national phenomenon here in Hawai'i. The shortage involves primary care and several key specialties in medicine. The Council believes that several recommendations should be actively pursued in 2010.

Recommendations to consider

- 1) Begin targeted recruitment of practicing physicians to become faculty in JABSOM and targeted GME programs. This has two benefits. It will immediately increase workforce in key areas while preparing Hawai'i to train more physicians.

- JABSOM medical student class size expansion - 7 to 10 years.
- Encouraging University of Hawai'i at Manoa Graduates – 10+ years.

If these measures are immediately and successfully executed, they have the potential of reducing the growing deficit from 60 physicians per year to 30 physicians per year by 2019. Consequently other system or programmatic changes will also need to be initiated to improve the growing shortage. Other solutions to consider include new models of care, interdisciplinary teams of health professionals other than physicians, quality agendas and reorganization of delivery services.

Respectfully submitted,

Hawai'i Medical Education Council, 2009