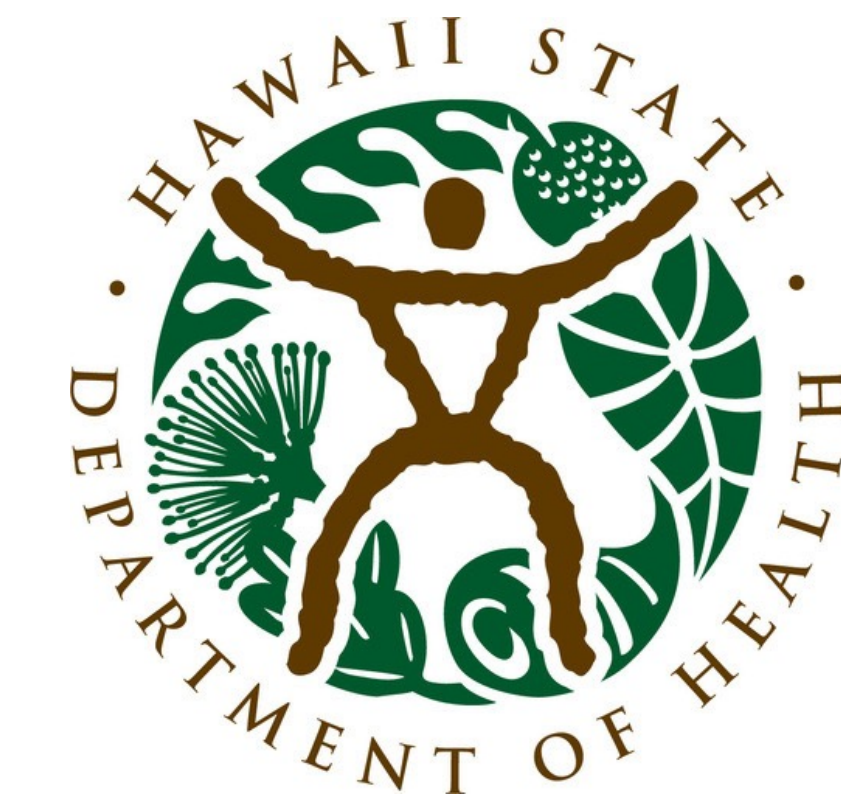




Epidemiologic Capacity and Need in Hawai'i: Status and Implications for Improvement

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BACKGROUND

- State epidemiologic capacity is essential for ensuring the public's health. Capacity in the Hawai'i Department of Health (HDOH) is believed to be insufficient. Even after 10 epidemiologist positions were established in 2008 by legislative mandate, 5 of those positions remain unfilled.
- Hawaii has the longest life expectancy in the nation and the second lowest rate of obesity in the nation. However, among ethnic groups in Hawai'i, the native Hawaiian population suffers from having the highest morbidity, mortality, chronic health conditions and health risks for being obese or overweight.
- Epidemiologists play a vital role in tracking disease incidence and burden

OBJECTIVES

- To understand the epidemiologic capacity and need in the Hawai'i Department of health.

STUDY SITE



The mission of the HDOH is to protect and improve the health and environment for all people of Hawai'i. It is the lone health department in the state of Hawai'i.

METHODS

- Face-to-face, structured interviews were conducted with all five HDOH epidemiologists hired under the statute and with one epidemiologist co-funded by the CDC and HDOH
- All six interviews were examined for common themes.

RESULTS

KEY FACTORS – QUOTES & THEMES

Findings from the interviews identify major areas of concern regarding epidemiologic capacity. These include the following:

Lack of Epidemiologic Capacity

- "Two groups that are not directly helped by epidemiologists are the Executive Office on Aging and the Behavioral Health Administration."
- "Programs that lack epidemiologic capacity are very service oriented."
- "They might not even recognize a need."
- "Health economics is very important. Very small number of health economists at the local level."
- "There are unfilled positions that need to be filled."

Hiring Issues

- "We need to hire more to help with the overload, but we need to deal with the State hiring system."
- "Because of hiring issues, she is currently overwhelmed with analyzing current data."
- "I am concerned with how the positions are written such that you need at least 2 years of experience with a masters degree before qualification. Internships are still considered schooling even though they are full time."

Poor Data Access and Linkage

- "We have been trying to get a super-user license to the Hawaii Health Information Corporation data since 2004."
- "We do not have any data on clinical measure performance. Not as ahead as some of the other states are regarding looking at that data."
- "We do not have the capacity or sources to look or collect HEDIS measures. As a result, we have to go to HEDIS to purchase data. However, we are encountering problems with NCQA."
- "The Department of Education is collecting school health forms but it is not accessible by HDOH."
- "Increased sharing of data is going to take leadership, maybe from the Director's office."
- "HMSA wants to work with HDOH but there are data sharing constraints."

Insufficient Student and Workforce Pathways

- "We want more students, just need them to come. We need to figure out a way to get a paid internship."
- "Need assistance with a more formal pathway to get student interns. Then having a pathway into professional jobs with the HDOH."
- "For students coming out with an MPH or undergraduate degree, where can they get their two years of work experience?"
- "We need to have a ladder system for advancement."
- "Possibly create research scientist positions. That would give flexibility in hiring biostatisticians or evaluation personnel."

Limited Infrastructure for Large Data

- "Missing link is the ability to have the IT systems to support having giant data such as Hawaii Health Information Corporation (HHIC)."
- "We cannot even comfortably store huge data sets."

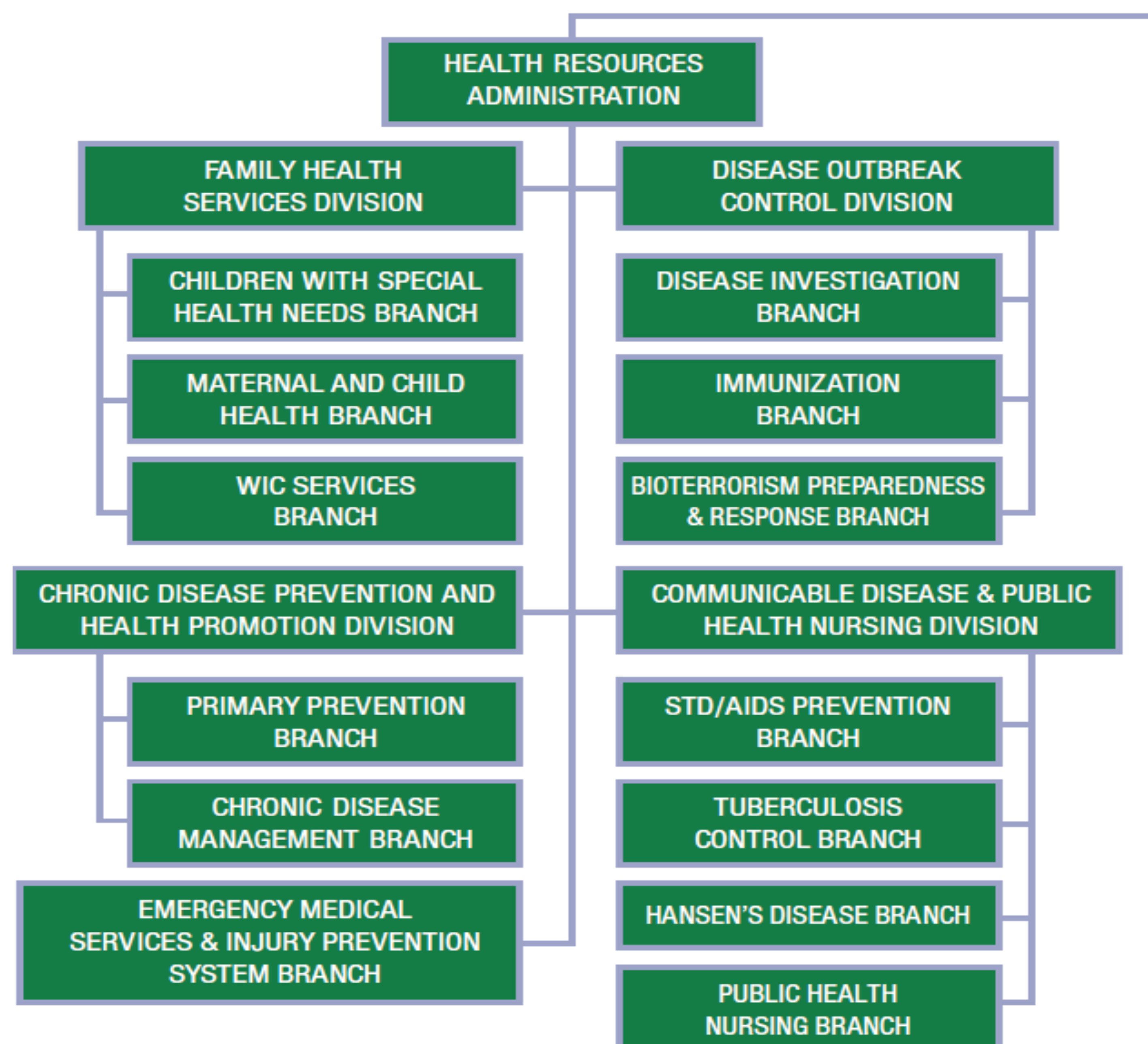
Barriers to Software Access

- "Getting access to SAS and SPSS is difficult. We used to have a group SAS/SPASS license."
- "We have to acquire SAS or SPSS on our own. It should be something provided by the department."

Need for External Expertise and Resources

- "Sometimes other epidemiologists do not have that peer to help with SAS, or other statistical software, coding."
- "There is a strong need for the University of Hawaii Office of Public Health Studies and the HDOH to share resources."

STUDY SAMPLE



•Epidemiologists worked in:

- Maternal and Child Health Branch
- Chronic Disease Prevention and Health Promotion Division
- Emergency Medical Services and Injury Prevention System Branch
- Disease Outbreak Control Division

•All 6 of the epidemiologists received an Masters in Public Health, with five of them specializing in Epidemiology and/ or biostatistics

CONCLUSIONS

Both innovative recruitment approaches to fill the civil service positions and adapting the epidemiologic program at the University of Hawaii to supply qualified candidates are needed. The HDOH would benefit from strengthening relationships with the university and the university affiliated Cancer Center. Improving communication between epidemiologists, including data sharing across divisions, and providing clear pathways to expert statistical support would improve the epidemiologic capacity within the HDOH.