

# SPOTLIGHT ON NURSING

## **Navigating Uncharted Waters: Preparing COVID-19 Capable Nurses to Work in a Transformed Workplace**

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*The Spotlight on Nursing is a recurring column from the University of Hawai'i at Mānoa's School of Nursing and Dental Hygiene (UHM SONDH). It is edited by Mary G. Boland DrPH, RN, FAAN, Dean of UHM SONDH; Kristine Qureshi PhD, RN, CEN, PHNA-BC, FAAN, Associate Dean of Research for UHM SONDH and HJH&SW Contributing Editor; and Joanne R. Loos PhD, Science Writer for UHM SONDH.*

The University of Hawai'i at Mānoa School of Nursing and Dental Hygiene is the major public educator of entry-level and advanced practice nurses for the state of Hawai'i, with an enrollment of 410 students and a mission and responsibility to serve our Hawai'i nei. In mid-March 2020, when COVID-19 cases were reported in Hawai'i, we pivoted from face-to-face to online learning; withdrew clinical students from a range of health care organizations; built non-traditional clinical experiences for students with agencies responding to the crisis; and restructured the school nursing partnership with the Department of Education (DOE) to launch a nurse hot line and telehealth visits with the Hawai'i Keiki Program school advanced practice registered nurses (APRNs).

A faculty member led the Hawai'i Emergency Management Agency (HI-EMA) Community Care Outreach Unit (CCO) team. Members came from UHMānoa medicine, nursing, public health, and social work faculties, UH graduate students, the CCO Unit Community Advisory Partners representing Native Hawaiian, Pacific Island, Filipino, elderly, and neighbor island and rural communities. The unit was tasked with identifying capacity, needs, and threats to the health of community members as a result of the COVID-19 disaster in Hawai'i and making recommendations to mitigate the situation. They began by assessing the current capacity, needs, and threats to agencies that provide health and social services support across the State and ascertain the agencies estimation of the impact of COVID-19 on the clients that they serve. The findings indicated that major issues for individuals that the 121 responding organizations serve revolve around securing basic needs such as food security, housing and access to services (job loss resulting in financial problems are a key root cause), mental health, COVID-19 concerns (including adequate personal protective equipment [PPE], cleaning supplies, quarantine, testing issues).<sup>1</sup>

### **A New Era of Emergency Preparedness**

COVID-19 has prompted calls for the country's disaster-

readiness workforce to scale up dramatically. In the United States, the health care infrastructure proved to be unprepared for the pandemic. Although stopping the spread of the virus was dependent on testing, supply shortages and bureaucratic and logistical barriers prevented adequate testing from taking place.<sup>1,2</sup> Contact tracing, another essential component for containing the spread of the virus, fell short largely because the United States lacked the workforce required to carry it out.<sup>3</sup>

The coronavirus pandemic has placed immense pressure on emergency rooms and intensive care units, highlighting the critical role of interprofessional teamwork as nurses, nurse practitioners, physicians and physician assistants are finding that collegiality and communication are not sufficient to manage the intensity of care. Emotional support to address stress and fatigue is also essential. Nurses employed in long-term care, public health, home care and the range of community based settings may have limited support for crisis response. Many of these organizations are small and lack the education capacity of the larger health systems.

Frontline providers and students required immediate understanding of a new highly transmissible respiratory pathogen, response to pandemics and particularly, the proper use of personal protective equipment (PPE) to prevent, treat, and control the spread of SARS-COV2. The Mānoa Nursing faculty developed a free online modular course that focuses on COVID-19 as a case example of pandemics, public health response, emergency management models, nursing care, and the ethics and stress of caring. UH Outreach College managed registration and hosting of content and the Hawai'i State Center for Nursing provided continuing education credits. The course launched in early April 2020. As of June 30, 2020, 289 nurses, 89 other licensed health care professionals, and 321 individuals with an interest in learning about COVID-19 had completed the course. Participants came from Hawai'i (68%), other United States (24%), and international areas (10%), with 6% from locations that were unknown/not reported. As of August 1, the course has been

updated to provide the most current information. Data regarding the course will continue to be updated as more information about the virus, transmission, and treatment emerges.

The UH nursing community recognizes that COVID-19 will be a health concern for the foreseeable future. As the state moves to reopen the economy, the key to containment would be a comprehensive public health approach. The school partnered with the Department of Health (DOH) to train clinician contact tracers (nurses, physicians, physician assistants and pharmacists). A team of faculty, staff from the UH Translational Health Science Center and student actors from the UH Department of Theatre and Dance created an interactive online program with simulated case scenarios. By mid-July, the program has trained approximately 400 people from Hawai'i County, Honolulu County, Kaua'i County, and Maui County, who are now skilled in contact tracing.

### **Accelerated Adoption of Telemedicine**

The COVID-19 pandemic and the school building closings have and will continue to disrupt the daily life and routine for children and families. Telehealth (TH), a term that is frequently used interchangeably with telemedicine, is the delivery and facilitation of health and health-related services including medical care, provider and patient education, health information services, and self-care using telecommunication technologies.<sup>4</sup> Tools include phone, text, computers with video, and specialized HIPAA compliant software products. Today TH includes mobile health applications, video and audio technologies, digital photography, and remote patient monitoring (RPM).

Nurses, nurse practitioners, pharmacists, and physician assistants will play a more significant role in acute, ambulatory, long-term care, and home care. The delivery of care will rely increasingly on artificial intelligence advancements and TH. Health care providers in the United States have been inching toward making more services available via TH for years, but COVID-19 has pushed the inevitable telemedicine adoption that is accelerating the shift to decentralize health care toward preventive and home care. In nursing, population health coursework for entry and advanced practice students will include expanded content and experiences in technology supported applications, which include the use of smartphones with health-related mobile applications and telehealth.

### **Team-Based Interprofessional Care Delivery**

The demand for effective teamwork and collaboration is growing rapidly. There is a sense of urgency, beyond national accreditation requirements, to prepare students for team-based practice to improve health care quality and value. Building capacity in teamwork and collaboration is key to transforming the delivery of health care and retaining the current workforce.

The Hawai'i Interprofessional Education Workgroup for Health Sciences & Social Welfare (HIPE) at the University of Hawai'i developed an interprofessional education curriculum grounded on the Interprofessional Collaboration Core Competency model.<sup>5</sup> Established in 2009 by six organizations committed to advancing interprofessional learning experiences and promoting team-based care, the Interprofessional Education Collaborative includes 21 national organizations, such as the American Association of Colleges of Nursing (AACN), American Association of Medical Colleges (AAMC), American Association of Colleges of Pharmacy (AACP), and American Public Health Association (APHA). The 2016 update to the original version broadened the competencies to include a focus on culture and population health.<sup>5</sup> These changes synergistically align with the UH's mission and serve to create a clear path for the involvement of public health, with the inclusion of social determinants of health and a focus on the overall improvement of health-related quality of life for the people of Hawai'i. The efforts of this group will accelerate change noting concerns related to the short and long term effects on all providers of working in high-volume, high-intensity settings where the number one stressor reported is loss of control.<sup>6</sup>

### **Navigating Forward**

As the health care field has been forced to pivot in light of the COVID-19 pandemic, among other changes, nursing education curricula and practice are being reinvented. The foci are on preparing entry level and advance practice nurses for frontline practice in a delivery system that is changing daily and will continue to need nurses that are COVID-19 competent across all delivery settings. Today, nursing is preparing for the long haul by contributing to the state response in a manner that uses nursing expertise and ensures students are capable and competent to enter a transformed workplace.

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