

SPOTLIGHT ON NURSING

Expanding Hawai'i Keiki School-Based Health Services to Meet the Needs of Communities in Hawai'i

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The Spotlight on Nursing is a recurring column from the University of Hawai'i at Mānoa Nancy Atmospera-Walch School of Nursing (NAWSON). It is edited by Holly B. Fontenot PhD, APRN, WHNP-BC, FAAN, FNAP; Research Director for Department of Nursing, Frances A. Matsuda Chair in Women's Health, and Professor for NAWSON, and HJH&SW Contributing Editor; and Joanne R. Loos PhD, Science Writer for NAWSON.

Acronyms

AAP = American Academy of Pediatrics
APRN = advanced practice registered nurse
DOE = Hawai'i State Department of Education
DOH = Hawai'i State Department of Health
HK = Hawai'i Keiki: Healthy and Ready to Learn
HKHH = Hawai'i Keiki Health Hotline
NAWSON = Nancy Atmospera-Walch School of Nursing
NP = nurse practitioner
PMHNP = psychiatric mental health nurse practitioner

The importance of in-person learning was highlighted during the school closures due to the coronavirus 2019 (COVID-19) pandemic. *Keiki* (children in Hawaiian language) spend many hours in school where they are provided essential support services which include free meals, school counseling, and school health services, which may be provided by a registered nurse (RN) or an advanced practice registered nurse (APRN) (nurse practitioner [NP]). In addition to academics, schools utilizing the Whole School, Whole Community, Whole Child model create an environment where *keiki* can develop healthy relationships, identity, and emotional skills that can improve overall wellbeing.¹ For academic year 2022-2023, 69% of the public non-charter schools in Hawai'i are considered Title 1, which is a designation for schools that have a minimum poverty threshold of 47.2%. The fall of 2022 will represent the third year in which *keiki* will head back to school since the start of the pandemic. Many of these *keiki* and families will continue to face ongoing health, economic, and social challenges, with low-income families and those living in rural and underserved areas continuing to be disproportionately affected by COVID-19.²

In order to better address these challenges, the Hawai'i Keiki: Healthy and Ready to Learn (HK) program has expanded. HK first launched in 2014 as a partnership between the University of Hawai'i at Mānoa Nancy Atmospera-Walch School of Nursing (NAWSON) and the Hawai'i State Department of Education (DOE) with a goal of keeping *keiki* healthy and ready to learn.³

HK began with 4 nurses providing school-based on-site services at 4 schools and consulting for 59 public schools across 5 DOE complex areas. Between the years 2014-2019, the program grew to a total of 18 nurses, which included 15 APRNs (NPs) and 3 RNs providing services and consulting for 236 (out of 257 total) schools across all 15 DOE complex areas. This allowed for each complex area in the state to have a nurse available for consultations on student health issues and/or provide health education; however, only 18 schools out of 257 total schools had an on-site nurse to provide direct services in the school health room/clinic. While there was a notable increase in the number of students seen by a HK nurse who can assess and often times return the student back to the classroom, at that time (2019) the majority of DOE schools continued to be without an on-site nurse clinic, resulting in students being sent home from school due to illness or injury and potentially kept out of school until they are able to access a community health provider.⁴

The closure of schools as a result of the pandemic put a spotlight on the importance of health in the school setting and reinforced the value that HK brings to Hawai'i public schools. When school campuses initially closed, school-based health services disappeared along with other important physical and emotional support services. Recognizing the need to provide equitable access to health services, the HK program quickly developed and implemented the HK Health Hotline (HKHH) utilizing interactive technology and mobile devices.⁵ Through HKHH, members of the school community had access to a nurse, Monday through Friday 8 AM to 3 PM, to answer any health-related questions, provide information on school and community resources, and to offer *keiki* in need of health care the opportunity to receive a telehealth visit with an HK APRN (NP). Unlike the on-site school health nursing services prior to school campus closures, which limited direct patient services to HK participating schools, HKHH expanded patient care offerings to families in all DOE schools.⁵

Nationally, school nurses have played an essential role in guiding communities throughout the pandemic⁶ and HK has been a critical resource for the delivery of clinical health services, health education, and many other COVID-19 response activities and responsibilities within Hawai'i. School nurses have historically been involved in communicable disease surveillance, prevention, and care coordination.⁷ However, with a shortage of HK nurses and/or support staff, HK faced the challenge of distributing much-needed services to students across the state. The DOE recognized this challenge, noting the importance of re-opening schools for in-person learning. Therefore, during Summer 2020, the DOE provided funding to hire an additional 15 RNs to assist in the COVID-19 response. This included COVID-19 education, school mitigation efforts, contact tracing of cases including family follow-up to assure safe return to school, as well as continuing to provide direct patient care services for students. Mobile telehealth equipment was also added to HK on-site school clinics to facilitate the HK RN's ability to obtain a virtual health exam with an HK APRN (NP) for students whom had potentially a higher level of health concern. This service, outside of the HKHH, facilitated a student's ability to obtain immediate primary care services from a NP in the school setting and return to class or home during a time when there were numerous barriers to health care for families associated with the pandemic.

COVID-19 testing also became a priority for schools to reduce the spread of infection and, thus, contributing to keeping schools open. The HK program assisted the Hawai'i State Department of Health (DOH) and DOE in the implementation of the Centers for Disease Control and Prevention Increasing Community Access to Testing program in schools as well as assisting DOH and health partners with COVID-19 vaccinations for students, DOE staff, and families. By the end of the 2020-2021 academic year, HK had launched on-site nursing services at 13 additional schools across the state, increasing total HK clinical sites to 35.

The 2021-2022 academic year continued to present students, families, communities, and schools with challenges on how to best move forward. Despite mitigation efforts and mass vaccinations, the pandemic continued to impact the people of Hawai'i. Furthermore, the need for mental health/behavioral health services was exacerbated following months of distance learning, high stress levels for students and families due to the pandemic, and a lack of access to mental/behavioral health services. The rate of adolescent depression, anxiety, and suicide attempts has risen during the pandemic,⁸ making it even more important to provide an additional safety net in addition to school-based mental and behavioral health services already in place. Thus, HK received additional funding from several sources to continue to expand school-based health services.

By the start of the 2021-2022 academic year, with funds from the DOE, the HK program grew to a total of 56 nurses. Then, with additional expansion funds from DOH in Spring of 2022,

HK finished the 2021-2022 academic year with 60 nurses (20 APRNs [NPs] and 40 RNs), and 1 grant funded psychiatric mental health nurse practitioner (PMHNP), each serving in various roles dedicated to schools throughout the state and/or on the HK administrative/leadership team. This expansion ensured that 56 schools had on-site services and 257 schools had consulting service, with every DOE complex area having access to RNs in multiple schools plus 1 dedicated APRN (NP) who would consult across schools. This expansion brought the nurse-to-student ratio down from 1 nurse to 5294 students in 2021 to 1 nurse per 3065 students in 2022. However, these rates are still far shy from the American Academy of Pediatrics (AAP) recommendation of 1 nurse per school.⁹

2021-2022 Program Outcomes

HK has 5 main goals: (1) reduce preventable, health-related, chronic absenteeism while minimizing interruption to instructional time; (2) enhance wellness in the school environment and community; (3) promote optimal student health through preventive screening and effective services for chronic health conditions; (4) collaborate with community partners and organizations to provide coordinated school health programs, services and resources; and (5) promote the nursing profession. The ability for HK to successfully meet these goals was certainly challenging during the pandemic. However, the expansion resulted in the program's ability to support students, schools, and the community by increasing health services statewide.

The program expansion allowed for more than 10 000 visits to be completed by HK nurses (RNs and NPs) in their clinics during the 2021-2022 academic year. In addition, through the use of technology, HK APRNs (NPs) conducted more than 200 virtual visits for physical health and more than 250 virtual visits for mental and behavioral health concerns via the PMHNP. The HK program also provided over 250 educational sessions, attended by over 10 000 DOE students or DOE staff. These educational sessions include emergency medication training for teachers, hands-only CPR, COVID-19 mitigation strategies, vaping prevention, and presentations on common pediatric chronic diseases (including identification of mental health concerns for *keiki*).

While the pandemic continued to challenge the delivery of education and health services, the HK program supported the schools by contributing to the mass COVID-19 testing events in schools (>12 000 tests) as well as performing COVID-19 testing (>7500 tests) within HK school clinics. Additional services and resources were provided through a coordinated effort between DOE, HK, and community partners throughout the state. These additional services included vision screening, hearing screening, dental screening and sealant application, and CPR training. HK nurses also served as clinical preceptors for 28 NAWSON nursing and dental hygiene students. Four HK APRNs (NPs) also successfully completed their Doctorate in

Nursing Practice degrees from NAWSON and 1 HK APRN (NP) completed a postdoctoral fellowship in evidence-based practice; these nurses with advanced degrees/fellowships will contribute to the excellence of HK clinical practice as well as innovative programming and outcome measurement within the HK program.

Moving Forward

To expand the scope of services throughout the state, HK plans to provide access to telehealth equipment to all RNs, allowing for virtual visits with an HK APRN (NP) as necessary. The telehealth equipment are portable virtual units that will be utilized if and when there is a student with an identified need and/or barriers to accessing other primary care services are noted. The program will also expand existing mental and behavioral health services by hiring 2 additional PMHNPs. These PMHNPs will provide telehealth services to students across the state as well as be available for consulting services to all HK nurses and other DOE staff as needed. In addition to the traditional clinic and telehealth services, the DOE has also provided funding to support each school (257) with a school health support staff. These staff, qualified as a medical assistant, certified nursing assistant, or community health worker, are being trained to help with managing the DOH COVID-19 screening and testing that is available for students and staff. These positions are essential to the ongoing functioning of the schools, plus will allow for the expansion of in-school COVID-19 testing that can help to mitigate virus spread in schools and at home, while also minimizing absences.

The COVID-19 pandemic, while very challenging for most people, has resulted in a greater appreciation for the importance of school nurses and services that promote student wellbeing. The pandemic has forever changed the delivery of health care, and HK nurses have adapted to meet the needs of the school community. Current programming and expansion efforts have made a tremendous impact, but more nurses are needed to achieve the HK goals and the AAP goal of 1 nurse per school.⁹ The HK team has been creative and flexible during this time of rapid expansion, and has demonstrated a deep commitment to the health and well-being of the students they serve.

Both the Hawai'i DOE and DOH have identified HK as a critical link to keeping *keiki* healthy and schools open. They have recognized that increasing the number of HK nurses and staff is essential for the current and future health of the state's children. Over the past 7 years, the partnership between DOE and HK has grown into a true collaboration that has provided robust services for the students and the larger school-based community. Increasing access to health care in the school-based setting reduces barriers to care, increases access to important services for youth at risk, decrease the time parents have to take off from work to obtain care for dependents, and decrease absenteeism/student's time away from school. Keeping students healthy also improves the well-being of our larger communities.

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