

SPOTLIGHT ON NURSING

Forming the Future: How Hawai'i Health Employers Envision the Roles of Population Health Nursing

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The Spotlight on Nursing is a recurring column from the Nancy Atmospera-Walch School of Nursing, University of Hawai'i at Mānoa (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 Associate Professor for NAWSON, and HJH&SW Contributing Editor; and Joanne R. Loos PhD, Science Writer for NAWSON.

The COVID-19 pandemic has highlighted how societal inequities have contributed to greater health disparities. Populations that routinely experience limited access to health care services, poorer economic and living conditions, and elevated incidence of chronic and infectious diseases, also suffered from higher rates of COVID-19 infection, hospitalization, and death.^{1,2} In Hawai'i, the greatest burden of the coronavirus disease 2019 (COVID-19) has fallen upon Native Hawaiians, Filipinos, and Pacific Islanders.^{3,4} The inequitable impact that COVID-19 has had on disadvantaged groups is the latest example of disparities in care and variability of health outcomes experienced in the state of Hawai'i and nation. This underscores the urgency to devise new approaches to health care delivery that incorporate the full range of factors influencing a person's health, beyond the provision of traditional health services.

Before the pandemic, the US health care system was undergoing a gradual transformation, spurred by rising costs, poorer health outcomes as compared to other developed countries, and inequitable distribution of resources. Momentum has shifted towards an approach to health care delivery that is centered on the health of the whole population, placing greater emphasis on quality of care, and addressing social factors that influence health outcomes. This has created new opportunities for health care systems, public health agencies, and community-based organizations to partner in novel ways to improve health outcomes.⁵

The intersection of medical care and public health is giving rise to the growing field of *population health*. Population health is defined most commonly as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.”⁶ Central to population health is addressing the many factors that affect a patient's health and wellbeing, collectively described as the social determinants of health (SDOH), or the conditions in places where people live, work, and play that affect a wide range of health risks and outcomes.⁷

Nurses are poised to serve as leaders in the transition to a population-focused health care system. As key promoters of stronger interconnections between health and social care in the community, nurses can bridge health care services with community resources.⁸⁻¹⁰ Professional nursing organizations and accrediting bodies have also emphasized the importance of identifying population health nursing competencies and strengthening population health skills in nursing curriculum to prepare generalist and specialist nurses for future roles in leading population health interventions.¹¹ Competencies for population-based nursing developed by the Quad Council Coalition of Public Health Nursing Organizations¹² are organized into 8 skill areas, including analysis and assessment, policy development and program planning, communication, cultural competency, community dimension of practice, public health science, financial planning and management, and leadership and system thinking. The American Organization for Nursing Leadership (AONL) has also published a set of competencies for nurse executives leading population health initiatives, which are organized into 5 major domains: communication and relationship building, knowledge of the health care environment, leadership, professionalism, and business skills.¹³

Population health roles for nurses working in health care agencies across the nation are rapidly evolving. In Hawai'i, registered nurses have been key partners in developing novel population health approaches to health care.¹⁴ To further explore nursing involvement in population health efforts in Hawai'i, faculty members at the University of Hawai'i at Mānoa (UHM) Nancy Atmospera-Walch School of Nursing (NAWSON), conducted an employer needs assessment. The information collected is used to inform curriculum revisions to the NAWSON's Masters of Science Advanced Population Health Nursing (MS APHN) program. Three faculty members convened a series of discussions with community partners who hire NAWSON graduates. Meetings were held in-person or virtually between May-June

2021. Representatives from 8 employers participated, including large health care systems (3), community health centers (3), a health insurance plan (1), and the Public Health Nursing Branch of the Hawai'i State Department of Health. Discussion centered around 2 questions: (1) What are the current and future roles for population health nurses in Hawai'i? and (2) What particular skills do population health nurses need?

Findings

Overarching themes from these discussions included (1) Roles for population health nurses, (2) Skills and knowledge needed by population health nurses, and (3) Future opportunities and challenges.

Roles for Population Health Nurses

Roles for population health nurses identified were numerous and varied across employers. The most common roles, described further below, include: complex care, care coordinator, quality improvement, health program manager, health educator, consultant, and outreach/emergency response. The settings in which population health nurses worked were diverse, and include community centers, home health, telehealth, ambulatory care or chronic disease clinics, outreach efforts to older adult or homeless populations, and special emergency response settings, such as Points of Distribution (POD).¹⁵

Complex care: Nurses provide 1:1 patient care in clinic/home settings, medication reconciliation, care plans, transition care (hospital to home), and chronic disease management, specifically among populations with diabetes, hypertension, congestive heart failure, and chronic obstructive pulmonary disease. Nurses are members of interprofessional teams involving medicine, nursing, pharmacy, social work, and dietetics, with the aim of preventing emergency department visits and admissions.

Care coordinator/Case manager: Nurses navigate patient barriers to care related to SDOH, such as finding resources to assist with food, housing, and transportation, and managing care plans to provide referrals for social, behavioral, or other needed services.

Quality improvement/Data analytics: Nurses monitor patient/population statistics, generate reports using data analysis software to identify gaps in care or improve care access, and perform utilization management. Nurses use data to guide complex care team interventions at the individual patient and population level. Data were also used to track quality measures and/or apply for grants.

Health program manager: Nurses contribute to all phases of health program management, including needs assessments, program design and development, implementation, and evaluation.

Health educator: Nurses provide health education to clinic staff, individual patients, and at-risk populations, such as those with chronic diseases, or persons undergoing palliative or end-of-life care. Nurses also organize community events such as health fairs, vaccination sites, and other outreach efforts.

Consultant to government agencies: Nurses working for the public health nursing branch consult with state agencies to provide information regarding public health issues affecting their populations.

Outreach and emergency response: As during the COVID-19 pandemic, nurses are assigned various emergency response roles, including contact tracers, vaccine administrators, hotline/education experts, and infectious disease screeners/test administrators. Nurses also conduct outreach to provide education to remote populations and deliver supplies to quarantined patients, such as food, sanitary items, and personal protective equipment (PPE).

Skills and Knowledge Needed by Population Health Nurses

Nurses require a broad set of skills and knowledge to take on the roles identified and lead population health interventions. Nurses are expected to possess in-depth knowledge of pharmacology, pathophysiology, epidemiology, and evidence-based practice. Commonly mentioned skills needed by population health nurses identified included assessment/analytics, program management and policy development skills, communication and cultural competency, community engagement, and management/fiscal planning skills.

Assessment and analytics: Nurses must be able to use data to assess and address SDOH and health care barriers. One employer summarized these skills as being able to understand how data is generated, and determine what data is "saying."

Program management and policy development skills: Nurses must be able to develop, manage and evaluate population health programs, implement and lead quality improvement, and contribute to developing and implementing agency policies (eg, standard operating procedures).

Communication and cultural competency: Nurses are expected to have strong communication skills utilizing all types of methods mediums. Nurses must also understand how an individual's background and preferences influence access to resources and their ability to maintain self-care. This was described as cultural awareness, cultural safety, holistic care, and contextual care, all of which reflect the importance of understanding how one's culture is influenced by many factors, including age/generation, race/ethnicity, religious/spiritual beliefs, and other circumstances (eg, homelessness, addiction, sexual preference, etc).

Public health and community engagement: Nurses were frequently described as relationship builders who were expected to keep abreast of health/social services available in the community as well as initiate and maintain relationships with health care providers.

Management and financial planning: Nurses are expected to be involved in multiple leadership activities and to develop innovative methods for meeting the needs of the populations served. Leadership efforts carried out by nurses included applying for grants, budgeting, and program evaluation.

Future Opportunities & Challenges

Employers identified innovation as one of the major opportunities for population health nurses. Hawaii's health systems are seeking to develop new, cutting-edge approaches to address SDOH impacting patient populations. Some innovations identified included transition care centers, interventions that target "rising-risk" patients to address health problems before the need for a hospital visit, and shifting traditional nursing care from acute care into community-based settings. As population health includes activities that occur outside of regular health services delivery, nurses have an opportunity to innovate new programs/interventions to address the SDOH. Further, employers are eager to hire population health nurses to oversee health promotion programs and translate data in ways that help providers understand how SDOH impact health care outcomes.

Future challenges were also identified. For example, while care is becoming more complex, necessitating the need for advanced nursing degrees, the level of education attained by nurses currently working in population health roles varies. Most nurses in these roles in Hawai'i possess an associate or bachelor's degree. Few nurses have obtained advanced degrees in population health nursing. Contributing to this challenge, institutions would need to expand roles, job descriptions, and requirements to allow nurses to work to the full capacity of their education, which would then justify pay differentials for nurses with advanced degrees. Another major challenge cited by employer institutions was the difficulty in hiring and retaining qualified nurses. This was especially true for community health centers. Finally, employers noted that most clinical support staff and medical personnel are not familiar with population health, so there is a need to upskill the entire workforce to better implement population health interventions.

Discussion

In Hawai'i, roles and skills for population health nurses are evolving to meet the changing needs of health care agencies that are experiencing novel challenges associated with both the pandemic and growing health disparities existing among underserved groups in Hawai'i. The roles of population health

nurses described by employers in Hawai'i are for a professional nurse with advanced skills who can expertly address both clinical needs and larger SDOH across the health care facility and the greater community setting.

Moving forward, nurses with advanced skills and knowledge can contribute greatly to leading population health interventions in Hawai'i and play pivotal roles in bridging and strengthening connections between health care providers, insurers, governmental public health entities, and the community. By doing so, nurses can build and evaluate programs that address the health priorities of their community, the health care agency, and also help to achieve national and state-based health goals. For example, nurses can collaborate with community partners to enhance prenatal care services, asthma service, and organize community efforts to expand houseless hygiene centers. Population health nurses can cement partnerships between health care systems and public health agencies to conduct comprehensive community assessments resulting in the establishment of collaborative programs to reduce chronic diseases, coordinate services, and share and review outcomes and metrics.

COVID-19 has amplified the critical importance of sharing data which may lead to data-driven population health interventions involving public and private agencies working in unison. Lessons learned from the statewide emergency response to the COVID-19 pandemic can be applied to future infectious disease outbreaks as well as chronic disease prevention efforts. For example, nurses can help to facilitate the reporting of disease and immunization records between health care systems and local public health departments. Nurses can then contribute to the development of vaccine dashboards to give real-time information on vaccine uptake and target outreach interventions for at-risk communities or groups.

UHM NAWSON Advanced Population Health Nursing Program

To meet these future challenges, the UHM NAWSON MS APHN prepares graduates to engage with patients in diverse contexts and develop advanced nursing knowledge to transform health care services for individuals, families, and communities. The program focuses on population-level health, wellness, SDOH, health promotion, and disease prevention, and its curriculum has been built to strengthen competencies in population-based nursing. Faculty members are reviewing the APHN program curriculum to meet the current and future needs of key stakeholders and employers in Hawai'i as identified in the discussions with community partners.

Summary

Major population health challenges lay ahead, including widening health inequities, impacts of climate change on human health, increasing incidences of natural and man-made disasters, and

future infectious diseases outbreaks.⁵ In this complex environment, nurses with advanced population health competencies are needed to provide expertise and organizational leadership. To continue to evolve to meet these challenges, robust training and educational experiences must be provided for nurses to assume future leadership roles in population health as envisioned by Hawai‘i health employers.

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