

# SPOTLIGHT ON NURSING

## Population Health: Proactive Solutions for Healthy Outcomes

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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 true sources of health are not the drugs we take and the doctors we see, nor how much we eat and how often we go to the gym. Instead, our health is determined by the world in which we live. The safety of our neighborhood, the amount of money we make, the people we interact with, the love and hate we encounter, the justice of our laws, the cleanliness of our air and water, the choices made by political leaders, and sometimes just sheer luck are what really decide whether we get sick or stay well.” – *Sandro Galeo MD, MPH, DrPH*

Social environments contribute directly to a wide range of health outcomes. The social determinants of health refer to conditions in the environments in which people live, work, play, worship, and age.<sup>1</sup> Traditionally, the public health sector factored the social determinants of health into practice, while the hospital sector focused on individual factors, such as illness and the provision of episodic curative services. However, health care in the US is evolving. These separate views are no longer sufficient, and population health is now considered the solution. Population health addresses the full range of the determinants of health and involves measuring and optimizing the health of groups by embracing the traditional social determinants of health as well as health care delivery.<sup>2</sup> The purpose of this article is to provide an overview of population health, highlight examples of how it is taking shape in Hawai'i, and discuss how the University of Hawai'i at Mānoa School of Nursing and Dental Hygiene (UHM SONDH) is preparing its graduate nursing students for new roles in population health in Hawai'i.

Population health represents a change in the focus of health care financing and delivery in our country. While there are several definitions, the term refers to “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.”<sup>3</sup> It is distinguished from the more commonly recognized term “public health,” which connotes a set of activities that are carried out by agencies with official functions that focus on the general public.<sup>4</sup> Population health includes some public health activities but goes further to give specific attention to aggregate populations. The population health approach incorporates outcome-driven strategies to manage health for

specific groups of individuals, which can be defined in various ways, such as those in geographic areas (local communities or small aggregate populations such as homeless people in a community) or those who have other characteristics in common (ethnicity, religion, health maintenance organization [HMO] membership).<sup>4</sup> Population health interventions are generally driven by health care organizations that target health among a specific aggregate population for which they are accountable, such as members of a health plan or individuals categorized by a health status indicator like high blood pressure or diabetes.<sup>5</sup> The goal of population health aligns with the Institute for Healthcare Improvement's “Triple Aim,” which seeks to (1) improve the patient experience of care; (2) improve the health of populations; and (3) reduce the per capita cost of health care.<sup>6,7</sup> During 2014, the State of Hawai'i issued its Healthcare Innovation Plan with an overall goal of transforming health care in Hawai'i. This plan includes the Triple Aim plus one additional goal of reducing health disparities across the state.<sup>8</sup>

The passage of the 2010 Patient Protection and Affordable Care Act (PPACA) put into place policies that prompted the US health care system to place more emphasis on primary and preventive care.<sup>9</sup> These policies included the adoption of expansive coverage in health insurance and health screening programs.<sup>9</sup> Currently, many types of health care organizations are using a population health approach to move beyond episodic patient encounters and direct efforts to also address the social determinants of health to improve long-term health outcomes to meet specific health care metrics.<sup>10</sup> The concept of population health reflects a fundamental shift in the approach to health care services, moving away from reactive responses to an individual's curative health needs toward a more outcomes-based, proactive view of health care delivery.<sup>11</sup>

### Nurses as Key Partners for Implementing Population Health Approaches

In the United States, nurses represent the largest segment of the health care workforce and are the most trusted of the health

care professions.<sup>12</sup> Registered nurses (RNs) play a key role in realizing the transformation of the health care system to adopt population health approaches. RNs engage with patients in diverse contexts, and offer a unique perspective and provide valuable insight into how health care affects individuals, families, and communities. They work in every area of the health care system and community, including in hospitals, schools, assisted living facilities, clinics, and many other community settings. RNs link people with community resources that support health and develop broad-based interventions that promote well-being.<sup>10</sup> They employ evidence-based practice with respect to policy that impacts patient care and outcomes.

To prepare for roles in population health, the field of nursing will need to develop broad-based knowledge and abilities that pertain to population health and learn to work and collaborate in new models of care that involve interprofessional health care teams.<sup>10,13</sup> Typical activities of RNs in a population health model are listed below. These roles represent a shift toward the utilization of RNs to the full scope of practice consistent with their education, with a vital role in care coordination, triage, and patient surveillance.<sup>13</sup>

Future roles for RNs will involve working with experts in informatics to improve care communication and documentation, manage the remote monitoring of patients, and quarterback population health initiatives.

### **Examples of RN Activities in Population Health Care**

- Serve as a member of the interdisciplinary care team focused on improving patient outcomes
- Identify and understand the patient population, stratify health risks, and engage individuals and communities to identify health goals
- Use technology to match demand to capacity and measure outcomes
- Recognize best practices to assure consistency of care across all facilities of a system, based on four fundamental elements: care management, real-time monitoring, actionable data analytics, and seamless transitions of care
- Assess and triage within patient groups to define at-risk individuals
- Coordinate care in a variety of public and private sectors
- Manage remote monitoring, including telehealth for groups of patients
- Provide a variety of direct-care services, including wellness visits, telephone triage, and support for chronic disease management
- Conduct home visits for monitoring at-risk and vulnerable populations

### **Registered Nurses (RNs) Play a Central Role in Hawai‘i’s Population Health**

Within the Hawai‘i health care community, different models for population health are taking shape, with nursing playing a central role. These models can be seen in the practices of the most widely used health systems in the state.

The Queen’s Health Systems is opening multiple family health centers with the goal of providing patients with enhanced primary care services (H. Taylor, MSN, FNP-BC, APR-Rx, written communication, December 2019). These facilities are being designed to provide a wide range of ambulatory care services such as primary care, after-hours/urgent care, diagnostic labs and imaging. Consistent with the population health approach, community members will also be invited to participate in health promotion and wellness activities within these centers. These centers will integrate state-of-the-art technology, allow patients to interact with clinicians in non-traditional ways, and employ a team-based care model to manage the health of high-risk groups of patients. While serving as members of interdisciplinary care teams, RNs will conduct annual wellness visits, provide direct patient care, and manage care coordination for complex patients.

RNs can also serve key population health roles in federally qualified health centers (FQHCs) across the state of Hawai‘i. FQHCs provide essential services to vulnerable populations and serve as the cornerstone of the health care system for the underserved in Hawai‘i, with more than 127,000 covered lives statewide.<sup>14</sup> RNs are the anchor of care coordination teams at many of these facilities. At the Kalihi-Palama Health Center in Honolulu, teams of RNs work closely with the surrounding area’s acute care facilities to assure a continuum of care for patients seen at multiple facilities (M. dela Cruz, MSN, RN, PCMH CCE, written communication, December 2019). RNs collaborate with patients, families, and caregivers to develop care plans that address barriers and incorporate patient preferences and lifestyle goals. They also link clients with community resources and provide health education to prevent adverse patient outcomes, such as readmission to the hospital after discharge.

In an integrated system, such as Kaiser Permanente Hawaii (KPHI), population health management includes programs or initiatives that improve individual health through chronic disease care management, health education, outreach, and follow-up. These programs complement primary care services with the goal of reducing the need for inpatient and emergency care. In KPHI, according to A. N. Busekrus, RN, MSN, Advanced Public Health Nurse-BC, CDE (written communication, December 2019), RNs manage the care of patients with complex chronic diseases using a population health approach. For example, teams of population health RNs monitor diabetic patients to prevent gaps in care. Using real-time data from electronic health records (EHRs), these RNs monitor important indicators that may lead to adverse health outcomes and track medication refills, ap-

pointments attended, and other important health information pertinent to the patient's care. In partnership with primary and specialty care providers, they start and adjust medications and insulin based on protocols and provide case management services and support for improved disease self-management. With the goal of helping patients manage their own health and close care gaps, population health RNs provide health education teaching sessions in person, by phone or by email, and follow-up with any interventions that they, or the primary care team, initiated.

Hawai'i Health Partners (HHP), the accountable care organization of Hawai'i Pacific Health, has a complex care management (CCM) department that plays a significant role in supporting population health, according to Laura Pladson RN, BSN, manager of CCM for HHP (written communication, December 2019). HHP's CCM team consists of an RN, a care coordinator, and a community health worker. This team works closely with the primary care provider team to deliver complex care services to patient populations that have challenging chronic health conditions that are difficult to manage and that often result in high emergency department utilization and/or require frequent hospitalizations. The CCM team members work together to coordinate care services, perform medication reconciliation, provide health education, assess ongoing client needs, and support access to community resources as needed. They also engage with patients and caregivers during home or clinic visits to promote greater understanding of personal health risks and consequences. The CCM team works to empower patients to become effective self-managers of their health.

### Educating Hawai'i's Health Care Providers

Keeping up with the demand for nurses with the skills to practice in population health requires that schools of nursing begin educational redesign. The focus is shifting away from setting, volume, and procedures and toward preparing nurses for the restructuring of care delivery toward meeting outcome metrics designed to improve patient outcomes and reduce costs. The University of Hawai'i at Mānoa School of Nursing and Dental Hygiene regularly meets with members of the Hawai'i health care community to assess how population health nursing is taking hold in our island community. The School of Nursing and Dental Hygiene offers the Advanced Population Health Nursing (APHN) Program, a 30-credit, online distance-based master's degree for RNs who wish to practice in Hawai'i, the US mainland or in an international setting.

The APHN program focuses on population-level health, wellness, health promotion, and disease prevention. Students gain opportunities to develop critical population health skills such as community and population assessment, complex project/program management, disaster nursing, health services research, and health policy analysis. This skill set has been identified by leading organizations and educators as essential for population health practice.<sup>15,16</sup> APHN graduates gain employment across a range of agencies, including insurers, health centers, community-based organizations, and health systems in the state.

### Conclusion

The focus on population health is leading to the redesign of nursing education and health care delivery across all settings in Hawai'i. RNs have the potential to contribute to the success of care teams, the achievement of metrics, and improved outcomes across the state. Globally, RNs have been recognized as essential members of interprofessional teams that deliver population-based health care around the world. Population health nursing has taken root and continues to grow in Hawai'i and beyond.

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