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# Preparing Nurses for New Roles in Population Health Management

National Advisory Council on Nurse Education and Practice (NACNEP)

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## The National Advisory Council on Nurse Education and Practice

The Secretary and, by delegation, the Administrator of the Health Resources and Services Administration (HRSA), are charged under Title VIII of the Public Health Service Act, as amended, with responsibility for a wide range of activities in support of nursing education and practice which include: enhancement of the composition of the nursing workforce, improvement of the distribution and utilization of nurses to meet the health needs of the Nation, expansion of the knowledge, skills, and capabilities of nurses to enhance the quality of nursing practice, development and dissemination of improved models of organization, financing and delivery of nursing services and promotion of interdisciplinary approaches to the delivery of health services particularly in the context of public health and primary care.

#### Authority

Section 851 of the Public Health Service Act, as amended (42 USC 297t). The Council is governed by provisions of Federal Advisory Committee Act, as amended (5 USC Appendix 1-16), which sets forth standards for the formation and use of advisory committees.

#### **Function**

The National Advisory Council on Nurse Education and Practice (NACNEP, or the Council) advises and makes recommendations to the Secretary and Congress on policy matters arising in the administration of Title VIII including the range of issues relating to the nurse workforce, nursing education and nursing practice improvement. The Council may make specific recommendations to the Secretary of Health and Human Services (HHS) and Congress regarding programs administered by the Division of Nursing and Public Health particularly within the context of the enabling legislation and the Division's mission and strategic directions, as a means of enhancing the health of the public through the development of the nursing workforce.

Additionally, the Council provides advice to the Secretary and Congress in preparation of general regulations and with respect to policy matters arising in the administration of this title including the range of issues relating to nurse supply, education and practice improvement.

## **NACNEP Membership**

#### Carol S. Brewer, PhD, RN, FAAN

Distinguished Professor, Emerita University at Buffalo School of Nursing Buffalo, New York

## Mary Burman, PhD, RN, FAANP

Dean and Professor University of Wyoming Laramie, Wyoming

## Lenora Campbell, PhD, RN

Professor and Associate Dean Division of Nursing Winston-Salem State University Winston Salem, North Carolina

# Katherine Camacho Carr, PhD, ARNP, CNM, FACNM, FAAN

Professor & DNP Internship Coordinator Seattle University College of Nursing Seattle, Washington

## John Cech, PhD

Deputy Commissioner Academic & Student Affairs Montana University System Helena, Montana

## Mary Ann Christopher, MSN, RN, FAAN

Chief of Clinical Operations and Transformation Horizon Blue Cross Blue Shield NJ Newark, New Jersey

#### Kathleen Gallo, PhD, MBA, RN, FAAN

Dean and Professor Hofstra Northwell School of Graduate Nursing & Physician Assistant Studies Hofstra University Hempstead, New York

# Rosa M. Gonzalez-Guarda, PhD, MPH, CPH, RN, FAAN

Associate Professor Duke University School of Nursing Durham, North Carolina

## Doris Hill, PhD, RN, CNOR

Dean of Health Sciences, Wellness & Human Services North Hennepin Community College Brooklyn Park, Minnesota

## Mary Anne Hilliard, Esq., BSN, CPHRM

Executive Vice President Chief Legal Officer Children's National Health System Washington, District of Columbia

# Ronda Hughes, PhD, MHS, RN, CLNC, FAAN

Associate Professor Director, Center for Nursing Leadership College of Nursing University of South Carolina

## Linda Kim, PhD, MSN, RN, PHN

AHRQ LAAHSRTP Post-doctoral Fellow UCLA Fielding School of Public Health Los Angeles, California

#### Linda Leavell, PhD, RN, MPH,

Executive Director, Nursing Pathways National Patient Care Services Kaiser Permanente Oakland, California

# Teri Murray, PhD, APHN-BC, RN, FAAN

Dean and Associate Professor Saint Louis University School of Nursing St. Louis, Missouri

# Sandra B. Nichols, MD, FAAFP, MHCDS, MS

Senior Vice President, Chief Medical Officer National Inpatient Care Management UnitedHealthcare Reston, Virginia

# Sally J. Reel, PhD, RN, FNP, FAANP, FAAN

Associate Vice President for Interprofessional Education University Distinguished Outreach Professor Clinical Professor of Nursing The University of Arizona Tucson, Arizona

## Barbara B. Tobias, MD

Robert and Myfanwy Smith Professor Vice Chair, Department of Family and Community Medicine University of Cincinnati College of Medicine Cincinnati, Ohio

## Federal Staff

#### NACNEP Chair

## Mary Beth Bigley, DrPH, MSN, APRN

Director Division

Division of Nursing and Public Health Bureau Health Workforce Health Resources and Services Administration Rockville, Maryland

#### Erin Fowler, MS, RN

Designated Federal Official Senior Advisor Division of Nursing and Public Health Bureau Health Workforce Health Resources and Services Administration Rockville, Maryland

#### Arti Patel Varanasi, PhD, MPH, CPH

President and CEO Advancing Synergy, LLC Baltimore, Maryland

## David Vlahov, PhD, RN, FAAN

Dean and Professor School of Nursing University of California, San Francisco San Francisco, California

# Major General Margaret C. Wilmoth, PhD, MSS, RN, FAAN

Deputy Surgeon General for Mobilization, Readiness and Army Reserve Affairs Office of the Surgeon General United States Army The Pentagon Washington, District of Columbia

## Kristen Hansen, MHSA, RN

Nurse Consultant Division of Nursing and Public Health Bureau Health Workforce Health Resources and Services Administration Rockville, Maryland

## Raymond J. Bingham, MSN, RN

Writer/Editor Division of Nursing and Public Health Bureau of Health Workforce Health Resources and Services Administration Rockville, Maryland

## **Executive Summary**

The passage of the Affordable Care Act (ACA) in 2010 has placed an increased emphasis on population health as a new focus for health care. Population health can be defined as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group." In this concept, the population as a whole is viewed as the patient. With 3 million registered nurses (RNs), nursing is the largest of the health professions and the foundation of the nation's healthcare workforce. In order to meet the demands of an evolving healthcare system, including the application of new knowledge and skills to different population groups, the nursing profession needs to adapt to the way it prepares new and practicing nurses.

The current undergraduate nursing education model focuses largely on providing acute care to patients in hospitals. However, healthcare organizations need nurses capable of gathering and analyzing population-level data, promoting wellness and disease prevention in the community, adopting and disseminating best practices for population health, and identifying patients who may benefit from greater outreach efforts to promote health screening and related primary care services. RNs can also have particular impact in rural and other underserved areas, where they may be the only health professionals providing services. For these populations, nurses need to develop broad-based knowledge, have a cradle-to-grave perspective on health, and learn to work and collaborate in new models of care including interprofessional healthcare teams. Nurses can also extend their reach by applying the emerging modalities of telehealth to provide health care, education, and monitoring to patients at a distance. In addition, support for nurse scientists is crucial, as they bring clinical insight and practical experience to the research enterprise in the development of evidence-based population health initiatives.

NACNEP sought guidance from experts in the field of population health, including academicians currently in the process of revising curricula to include population health concepts. NACNEP also consulted with professionals currently working with the nursing community to determine the educational needs of practicing nurses. The 14th annual NACNEP report and accompanying recommendations emphasize changes in policy, legislation, and research to strengthen nursing's ability to lead and to practice population health management initiatives. The recommendations below underscore the potential benefits to the nation of targeting Title VIII funding to support the essential development of the nursing profession and align nursing education and practice with new and emerging models of effective health care. These investments promise to advance nursing education and practice, and provide necessary support for educational institutions and partners to devise new models of care to move the nation's populace toward better health.

## Summary of NACNEP Recommendations

**Recommendation 1:** NACNEP recommends that agencies serving rural or frontier areas, such as HRSA, the Veterans Health Administration, and the Indian Health Service, better coordinate their undergraduate nursing student training programs to reduce administrative burdens on schools and clinical sites, and expand access to a wider variety of clinical opportunities.

**Recommendation 2:** NACNEP recommends that Congress provide funding to develop a more comprehensive public health infrastructure in rural, frontier, inner city, and other underserved

areas, including improving access to clear and accurate health information, remote health monitoring, and telehealth and other virtual access services

**Recommendation 3:** NACNEP recommends that HRSA's Title VIII funding opportunity announcements for registered nurse education and training include language that encourages grantees to develop curricular innovations that integrate population health competencies across the nursing educational pipeline from undergraduate to post-doctoral studies.

**Recommendation 4:** In accordance with recommendations from NACNEP's 11<sup>th</sup> report, the Council recommends that Congress place renewed emphasis on providing access to educational grants through Title VIII funding opportunity announcements for nursing students from underrepresented or minority backgrounds and for minority-serving schools of nursing, to promote a nursing workforce better prepared to practice in underserved communities and address the complex health needs of an increasingly diverse U.S. population.

**Recommendation 5:** NACNEP recommends that Congress and the HHS Secretary work with the National Institute of Nursing Research, the National Center for Advancing Translational Science, and other relevant federal research agencies to expand investment in population health science, including infrastructure and training, and increase funding support for research studies on population health management initiatives and data collection on population health measures and metrics.

**Recommendation 6:** NACNEP recommends that HHS establish and convene a federal working group to address population health.

## **Introduction: Nurses in an Evolving Healthcare System**

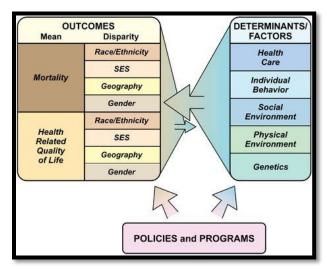
There are almost three million registered nurses (RNs) in the United States, making nursing the largest of the health professions and the foundation of the nation's healthcare workforce (U.S. Department of Health and Human Services, 2014). The passage of the Affordable Care Act (ACA) in 2010 represents a major evolutionary shift for the healthcare system toward *population health*, with an emphasis on primary and preventive care to help people stay healthy, avoid chronic conditions, and reduce the need for acute care and hospitalization. To keep pace, nursing education and practice will have to adapt, and nurses will need to learn how to play a greater role in population health.

## Defining "Population Health"

There are many ways to define population health. One frequently used definition from Kindig and Stoddart (2003) is "the health outcomes of a group of individuals, including the distribution of such outcomes within the group," which focuses on the assessment of health and health outcomes of whole groups of people, and the unequal distribution of health across various sub-groups. Alternatively, the Institute of Medicine (IOM, 2014) [Note: now the National Academy of Medicine] has described population health as "an approach that treats the population as a whole (including the environmental and community contexts) as the patient." In this view, population health involves applying health strategies, interventions, and policies at the population level rather than through the episodic, individual-level actions common within acute care. Throughout this report, NACNEP uses elements of both definitions.

## A Population Health Model

Kindig's model below illustrates the concept of population health: the left side presents population health outcomes, along with areas where health disparities occur, while the right lists five categories of the determinants of population health, each of which has a biological impact on both individual and population health outcomes (Kindig, Asada, and Booske, 2008).



Note: Figure taken from Kindig, (n.d.): http://www.improvingpopulationhealth.org/blog/what-is-population-health.html

The particular "population" covered by the term "population health" can be defined many ways, with the most common being by:

- Geographic area, such as all residents of a particular neighborhood, state, or region; and
- Shared characteristics not limited by geographic boundaries, such as age, race, ethnicity, religion, occupation, education, health status, disability, or sexual orientation.

Government programs and policies generally seek to produce changes in health determinants or factors (right box), which in turn influence health outcomes (left box). Note that arrows go in both directions, because outcomes such as morbidity can impact a determinant or risk factor. For example, a high level of childhood illnesses in a community can cause an increase in school absences and lead to lower educational attainment. In addition, overall measures of health can be high within a defined population if the majority of individuals are relatively healthy, even when a minority may suffer poorer health with more limited healthcare resources. Ideally, a focus on population health would seek to reduce or eliminate such disparities (Kindig, n.d.).

## The Business Case for Population Health Management

One aspect of population health, *population health management*, involves the range of activities that address the promotion of health and wellness and the prevention of disease (Kindig, 2007). Healthcare organizations use population health management to move beyond episodic patient encounters to address more longitudinal health outcomes and meet specific healthcare metrics (Loeher, Lewis, and Bogan, 2016). The goal is to keep the patient population as healthy as possible and minimize the need for acute care interventions such as emergency room visits and hospitalizations (Watson Dillon and Mahoney, 2015). Successful population health management initiatives could be measureable in terms of a reduction in the total cost to the organization or to society of health care (Bolton and Anderson, 2014). Particular targets might include:

- higher levels of physical activity,
- declines in newly diagnosed cases of diabetes,
- lower rates of preterm births and infant mortality, and
- fewer work days lost to illness or disability (IOM, 2014).

In a study conducted by the Northeastern University Institute on Urban Health Research and Practice (McGuire, 2016), with funding support from the Robert Wood Johnson Foundation, researchers surveyed five private healthcare organizations that had adopted a population health management approach by incorporating interventions that were outside of typical acute medical care and encompassed care of the broader community. The researchers found that each organization made a business case for a population health management approach based on principles which included:

- fulfilling the organizational mission,
- taking advantage of changes in reimbursement mechanisms,
- addressing changes in the healthcare market, and
- meeting the expectations of community partners.

However, population health management strategies can bring new organizational challenges, and measuring their impact on health outcomes or organization finances is difficult. Business

interests play a significant role in how these organizations shape their investments and what initiatives they pursue (McGuire, 2016).

## The Value of Nursing in Population Health Management

RNs can bring great value to population health management. The nursing model focuses on assessment and management of all of the physical, biological, social, psychological, and environmental influences on health. Within the healthcare system, nurses serve as the primary contact with and advocate for patients, families, and communities. As the largest of the health professions, nursing plays a key role in enhancing the responsiveness of the healthcare system to the needs of all individuals and populations (American Association of Colleges of Nursing [AACN], 2016). Nurses are in an excellent position to identify issues affecting the health and

well-being of their patients, discern patterns across patient populations, link patients with community resources and social services, and develop broadbased interventions (Bachrach and Thomas, 2016).

Nurse leaders are active and innovative in addressing the health of a range of different populations, as shown by the many evidence-based, nurse-led programs that have received *Edge Runner* recognition from the American Academy of Nursing (See Sidebar).

The jobs of many nurses are changing dramatically in the evolving healthcare system. Nurses are assuming expanded roles for a broad range of

#### Sidebar: Examples of population health-based nursing programs

- Eleventh Street Family Health Services, founded by Patricia Gerrity, PhD, RN, FAAN, provides community-based clinical, preventive, and health promotion services in an underserved inner-city area, while also functioning as a clinical site for undergraduate and graduate nursing students and students from other health disciplines to promote interprofessional team care (American Academy of Nursing [AAN], 2012a)
- Coping Skills Training, developed by Margaret Grey, DrPH, RN, FAAN, teaches youths with Type 1 diabetes the coping skills they need to manage their chronic condition, saving millions of dollars in diabetes care. In addition, Dr. Grey developed an on-line diabetes prevention program that can reach millions of youths across the country to help them lower their risk of developing Type 2 diabetes (AAN, 2012b).
- The Arkansas Aging Initiative, directed by Claudia Beverly, PhD, RN, FAAN, consists of a network of eight regional centers across the state that provide person-centered primary care, health education, and social services to aging adults, with an emphasis on those residing in rural areas. The centers also serve as sites for interprofessional training and practice (AAN, 2012c).
- The Family Health and Birth Center, founded by Ruth Lubic, EdD, RN, CNM, FAAN, in 1994 in a low-income neighborhood of Washington, D.C., has helped lower the city's infant mortality rate, while improving birth outcomes and lowering costs. Using this model of care across all births in the United States could save the Medicaid system up to \$2 billion per year (AAN, 2012d).

patients in ambulatory care and community-based settings which involve new responsibilities for population health, care coordination, and interprofessional collaboration (Fraher, Spetz, and Naylor, 2015). Van Dijk (2016) proposed that nurses have the potential to influence population health at all levels, including individual and institutional care and healthcare policy.

A report by HRSA's Advisory Council for Interdisciplinary, Community-Based Linkages (ACICBL) called for new models of care to move nurses into the community (ACICBL, 2014). Another ACICBL report (2013) recommended the engagement of communities in all aspects of care delivery. As population health moves the healthcare system towards community-based preventive and proactive approaches, nurses need to be able to take on roles as care coordinators,

case managers, and transition specialists, and they will be called on to work with and lead teams that include physicians, pharmacists, social workers, dieticians, and others (Chase, 2016).

To take one example, the federal Maternal, Infant, and Early Childhood Home Visiting Program, a collaborative program with the Center for Medicaid & CHIP Services (CMCS) and HRSA through the ACA, provides funding to state and local health departments for evidence-based home visiting interventions targeting at-risk pregnant women and families with young children (Wachino and Macrae, 2016). Years of research have demonstrated the benefit of home visits by RNs working alongside other trained personnel in improving maternal and child health and child development, promoting positive parenting skills, advancing school readiness, and reducing child injuries and abuse. The social impact of this program is also significant, leading to declines in child emergency room visits and hospitalizations, use of child protective services, and need for special education services. RNs working in these interventions need training in child development, parenting support, home health assessment, quality improvement, data collection and analysis, and accessing community resources (Administration for Children & Families [ACF], HRSA, 2016; HRSA, ACF, 2016).

A population health approach has helped the Banner Health system, a pioneer accountable care organization (ACO) covering several states in the western United States, to develop new ways of delivering care. As outlined in the ACA, an ACO consists of a group of doctors, nurses, and other healthcare providers who join together to give coordinated, high-quality care to their patients that promotes wellness and preventive services (Centers for Medicare and Medicaid Services [CMS], 2015). RNs in the Banner Health ACO system can identify best practices to assure consistency of care across all of their facilities, based on four fundamental elements: care management, real-time monitoring, actionable data analytics, and seamless transitions of care. They are knowledge workers, with a vital role in care coordination, triage, and patient surveillance. Future roles for RNs will involve working with informaticists to improve care communication and documentation, managing the remote monitoring of patients, and quarterbacking population health initiatives.

Another example of a population health approach is Kaiser Permanente (KP), which employs over 50,000 RNs. KP has embraced population health management for its members with the objectives to increase use of primary care, improve individual health through care management, and reduce the use of inpatient and emergency care. Steps to achieving these objectives include identifying and understanding the patient population, stratifying health risks, and engaging both individuals and communities to identify health goals, while using technology to match demand to capacity and measure outcomes (Chase, 2016).

Preparing nurses for more robust roles in population health will require educational redesign to address current gaps, including a redesign of undergraduate nursing curricula, a focus on rural and underserved areas, training in telehealth modalities, and support for nursing research in population health interventions. A population health perspective also allows nurses to identify and engage the "unseen patients," those members who do not regularly show up in clinics or access services but may benefit from outreach efforts to promote routine care and preventive services (Chase, 2016).

## **Addressing Gaps in Population Health Nursing**

## Educational Redesign of Undergraduate Nursing Curricula

Preparing nurses for more robust roles in population health will not only take a change in mindset but will take significant educational redesign, more focus on rural and underserved primary care sites, and additional nursing research in population health. Nurses are the interface between the healthcare system and the individuals, families, and communities it serves. With proper training, they can identify issues affecting the health and well-being of their patients, identify patterns across patient populations, help link community resources and social services, and develop broad-based interventions (Bachrach and Thomas, 2016).

Nursing has the opportunity to redesign its undergraduate educational system to train nurses to function and thrive in a transformed healthcare system addressing population health. Educational redesign needs to encompass both *revising* the curriculum for current nursing students, and *retraining* the nurses currently in the workforce (Fraher, Spetz, and Naylor, 2015).

Additionally, promoting population health requires an educational shift away from the illness-focused acute care skills traditionally taught in undergraduate nursing programs. Nursing fundamentals in health assessment, pathophysiology, and patient care will need to expand to include material focused on assisting the individual or family to achieve the highest level of functioning possible, as well as communication with individuals, families, and the community (AACN, 2013).

Calhoun and Harris (2016) state nurses need greater educational preparation in:

- population health competencies,
- coordinating with interprofessional teams,
- recognizing and responding to epidemiologic patterns,
- understanding care as value-based with a focus across the lifespan, and
- using ambulatory care delivery models.

Nursing curricula need to incorporate these competencies to prepare the workforce to undertake population health initiatives, support complex patient groups, provide care coordination, analyze population-level data from electronic health records and other sources, and optimize the use of research to promote evidence-based care (Fraher, Spetz, and Naylor, 2015). However, many nurses rate themselves as unprepared to conduct population-level assessment, evaluation, and research (Issel and Bekemeier, 2010).

Policies and programs to better prepare nursing students in population health include:

- including population health concepts in curricula, testing, and licensure;
- training nurses currently in practice through continuing education; and
- providing certification in population health competencies for RNs (AACN, 2013).

At the undergraduate level, there are courses from disciplines such as public health or social work designed to help students understand the biological, social, political, economic, and environmental underpinnings of health and introduce the scientific framework of population

health. One undergraduate nursing course in population health, offered at Boston College, adds issues that nurses are likely to encounter, such as health equity, community health assessment, epidemiologic methods, and ways to bridge clinical care and population health (Bachrach and Thomas, 2016). Incorporating such courses into the nursing curriculum would provide nurses with a broader background and promote interprofessional education.

## Population Health in Rural and Underserved Areas

Almost every state has counties or other areas designated as rural or frontier, and RNs may be the only health professionals serving these areas. The importance of population health management strategies becomes evident when examining the socioeconomic and health disparities experienced by rural residents, who tend to have higher rates of poverty and chronic disease, lower levels of health insurance coverage, and riskier health behaviors, while also dealing with more difficult access to health care than residents in urban areas (Buck, Crawford, Gale, Holzmark, and Mills, 2015). However, attracting and retaining health professionals in remote areas presents many challenges.

For example, residents in Montana tend to report chronic health problems such as high rates of obesity or smoking. Sparsely populated, Montana had many regions designated as Health Professional Shortage Areas. Residents of these regions often must travel long distances to obtain healthcare services. Nurses may be the only providers, so they need to have a broadbased knowledge, strong communication skills, commitment to their patients, a cradle-to-grave perspective on health care, and an ability to improvise. They often must learn to collaborate with other health professionals and social service organizations to assist their patients with chronic disease management, as well as housing, food, job training, and education (Cech, 2016a).

Responding to these concerns, the Montana university system is revising its nursing programs to focus on rural health issues. Undergraduate nursing students receive coursework in rural population health emphasizing patient-centered care, health promotion and risk reduction, and health teaching and communication. They are taught in collaborative, interprofessional healthcare teams, and have options to work with local or tribal health departments. However, difficulties arise in the great distances involved in traveling to clinical sites in sparsely populated areas. Most nursing educational grants do not provide funding for travel. Meanwhile, remote community health agencies or Federally Qualified Health Centers cannot provide housing for visiting students during extended clinical rotations, and need supplemental staff to assist with training. In addition, federal programs serving these areas, including HRSA, the Veterans Health Administration, and the Indian Health Service, often do not to coordinate background checks and other clearances, creating obstacles to clinical rotations (Cech, 2016b).

Many of the concerns faced by Montana in trying to attract and train RNs and other healthcare workers and broaden access to healthcare programs also apply to underserved areas across the country with poor transportation and difficult access to services.

Efforts to address population health management in either rural or urban areas can be enhanced through the use of telecommunication technology to connect with patients, provide information, gather data, identify gaps in care, and measure outcomes. This emerging modality of *telehealth* can help nurses monitor a patient's health status, provide consultation, and offer health education

For example, texting-based services or mobile apps can provide messages to promote prenatal care or remind patients with congestive heart failure to take their medications (ACICBL, 2013).

Barriers limiting the use of telehealth modalities include reimbursement to providers, licensure requirements across state or other boundaries, workforce preparation and training, and questions of cost effectiveness (IOM, 2012). While these are challenges that need to be addressed, for the purposes of this report NACNEP focused on recommendations that the Federal government could adopt or implement.

Expanding the use of telehealth will require improving the skills of the nursing workforce in the use of information technology. As one nurse states, "In primary care we now have a much greater emphasis on population health, caring for a group of patients outside of the traditional office visit...This shift requires a different nursing skill set and a new set of proficiencies...The telephone is our stethoscope, and keeping patients healthy and safe at home is our ultimate goal" (Bergeron, quoted in Lynch, 2016).

## Nursing Research in Population Health

Nurses are well positioned to study the impact of population health management through nursing research. The adoption of population health strategies within public health, medical, business, government, and educational institutions calls for a trained workforce that can develop population health science and apply the evidence it creates to health interventions. Nurse scientists bring a unique combination of clinical insight and practical experience to the research enterprise. They possess a diverse set of skills in basic scientific discovery, along with the ability to translate this knowledge into healthcare initiatives (Bachrach, Robert, and Thomas, 2015).

Supporting the next generation of nurse scientists is integral to sustaining and advancing population health management. This means getting more entry-level nurses educated at the baccalaureate level, in preparation for educational advancement into graduate programs. Research into healthcare interventions can help nurses improve the practice of population health management. Once developed, further efforts are needed to collect information on the most effective evidence-based interventions, and disseminate them into broader practice.

## NACNEP Recommendations

NACNEP sought guidance from experts in the field of population health, including academicians currently in the process of revising curricula to include population health concepts. NACNEP also consulted with professionals currently working with the nursing community to determine the educational needs of practicing nurses. The 14th annual NACNEP report and accompanying recommendations emphasize changes in policy, legislation, and research to strengthen nursing's ability to lead and to practice population health management initiatives. The recommendations underscore the potential benefits to the nation of targeting Title VIII funding to support the essential development of the nursing profession and align nursing education and practice with new and emerging models of effective health care. These investments promise to advance nursing education and practice, and provide necessary support for educational institutions and partners to devise new models of care to move the nation's populace toward better health.

**Recommendation 1:** NACNEP recommends that agencies serving rural or frontier areas, such as HRSA, the Veterans Health Administration, and the Indian Health Service, better coordinate their undergraduate nursing student training programs to reduce administrative burdens on schools and clinical sites, and expand access to a wider variety of clinical opportunities.

Rationale: Lack of coordination often hinders students in their clinical training. For instance, having standardized clinical background checks accepted across all agencies would facilitate student access to a greater range of training sites.

**Recommendation 2:** NACNEP recommends that Congress provide funding to develop a more comprehensive public health infrastructure in rural, frontier, inner city, and other underserved areas, including improving access to clear and accurate health information, remote health monitoring, and telehealth and other virtual access services. The Council further recommends changes to healthcare legislation to promote the involvement of registered nurses and advanced practice nurses in primary care to the full extent of their education, and to ease the provision of care across state boundaries through telehealth and related services.

Rationale: Many rural areas lack access to basic healthcare services. While technological advances in telehealth promise to extend the reach of clinicians and improve the efficiency of the healthcare system, many areas of the country lack sufficient infrastructure to support telehealth initiatives, limiting health care options for individuals who live in remote areas or lack transportation.

**Recommendation 3:** NACNEP recommends that HRSA's Title VIII funding opportunity announcements for registered nurse education and training include language that encourages grantees to:

- a) Establish and/or expand population health clinical learning opportunities for nursing students in community health organizations.
- b) Develop curricular innovations that integrate population health competencies across the nursing educational pipeline from undergraduate to post-doctoral studies.
- c) Promote training to better prepare nursing faculty to teach both incoming and practicing nurses the skills needed to address population health management.

Rationale: Funding priorities need to promote the integration of population health concepts and competencies across the nursing curriculum to prepare all nurses for expanded roles in population health management.

**Recommendation 4:** In accordance with recommendations from NACNEP's 11<sup>th</sup> report, the Council recommends that Congress place renewed emphasis on providing access to educational grants through Title VIII funding opportunity announcements for nursing students from underrepresented or minority backgrounds and/or for minority-serving schools of nursing, to promote a nursing workforce better prepared to practice in underserved communities and address the complex health needs of an increasingly diverse U.S. population.

Rationale: This recommendation supports and furthers the recommendations on diversifying the nursing educational pipeline and workforce presented in the 11<sup>th</sup> NACNEP report. HRSA

studies have strongly supported the role of workforce diversity in improving access to care and health outcomes in minority and underserved communities.

**Recommendation 5:** NACNEP recommends that Congress and the HHS Secretary work with the National Institute of Nursing Research, the National Center for Advancing Translational Science, and other relevant federal research agencies to expand investment in population health science, including infrastructure and training, and increase funding support for research studies on population health management initiatives and data collection on population health measures and metrics.

Rationale: Nursing research is needed to develop effective, evidence-based initiatives to help nurses promote population health. The goal of this research would be to develop an appropriate evidence base to support effective, culturally appropriate health interventions; improve the availability of clear and accurate health information; promote access to health care for all populations, including the use of technology for telehealth services; and reduce health disparities and achieve health equity.

**Recommendation 6:** NACNEP recommends that HHS establish and convene a federal working group to address population health. This working group would consist of representatives from agencies across HHS and related agencies of the federal government involved in the areas of public health, population health, health research, and the healthcare workforce, as well as housing, education, and justice.

Rationale: The goal of this working group would be to promote cooperation and improve interagency collaboration in population health funding initiatives and healthcare workforce development related to improving the health of the American public and advancing the objectives of the Affordable Care Act.

## **List of Abbreviations**

AACN American Association of Colleges of Nursing

AAN American Academy of Nursing

ACA Affordable Care Act

ACF Agency for Children and Families

ACICBL Advisory Council for Interdisciplinary, Community-Based Linkages

ACO Accountable Care Organization

CMCS Center for Medicaid & CHIP Services

CMS Centers for Medicare and Medicaid Services

HRSA Health Resources and Services Administration

IOM Institute of Medicine [Note: Now the National Academy of Medicine]

KP Kaiser Permanente

HHS

NACNEP National Advisory Council on Nurse Education and Practice

Department of Health and Human Services

RN Registered Nurse

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