

# Progress and Precision: The NCSBN 2018 Environmental Scan

*We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don't let yourself be lulled into inaction. —Bill Gates*

## Introduction

The annual National Council of State Boards of Nursing (NCSBN) Environmental Scan provides regulators and other nursing leaders with a current, comprehensive portrait of nursing in the United States, including emerging issues and challenges. It describes the current state of nursing and where we are headed, and it asks questions about our readiness to enter the modernized era of health care. As you are reading it, ask yourself: Are we ready to take nursing to the next level? Are educators ready to evaluate their curricula and incorporate new content? Are regulators ready to accept present and future challenges of mobility, workforce, confidentiality issues, new treatment methods, advancements in scope of practice, and, potentially, fresh approaches to opioid addiction? Are state legislators willing to take the necessary steps to pass legislation to modernize regulation and to be an important part of this transformation? Modernization of health care cannot adequately be achieved without the participation of nursing, and a new era of nursing depends on a contemporary and revitalized regulatory system. The environmental scan is present and future based and reflects substantial professional, social, and political changes needed for regulators and other nursing leaders to keep pace with potential health care system transformations.

## The U.S. Nursing Workforce in 2018 and Beyond

Nursing is at the heart of health care. Sufficient numbers of nurses at all levels and the ability to forecast and plan for shortages is integral to safe and quality patient care. For this reason, NCSBN has acted to ensure that researchers have the data required to monitor future workforce needs. In 2017, NCSBN collaborated with the National Forum of State Nursing Workforce Centers to conduct a national workforce study to assess and describe the current RN and LPN workforce (in press). The findings data will be published in the July 2018 issue of the *Journal of Nursing Regulation*.

Individual boards of nursing (BONs) are also collecting workforce data with licensure renewals, which are being deposited into NCSBN's National Nursing Workforce Repository. When all boards can provide these data, nursing will have a profound and accurate database, including population data, with which to analyze the workforce and make predictions.

It is expected that 2018 will be a historic and landmark year for nursing regulation and the nursing workforce. The enhanced Nurse Licensure Compact (eNLC), nursing regulation's newest licensure model, was officially implemented on January 19, 2018. Currently adopted by 29 states, the eNLC enables nurses to receive a multistate license in their state of residence with the privilege to practice in all other states that joined the compact. The eNLC increases public protection as it: (a) mandates specific nursing licensure requirements for participating states; (b) provides improved access to care through greater workforce mobility, allowing nurses to migrate to locations with the greatest need and job availability; (c) enhances telehealth nursing, which can expand the workforce into shortage areas; and, (d) perhaps most importantly, mobilizes nursing care quickly, efficiently, and safely during a disaster. For military spouses who are nurses and who may have to frequently move and change jobs, the eNLC offers an opportunity for many to move without being relicensed. In addition, nurses with compact/multistate licenses have the flexibility to care for patients across state borders without the time and expense of obtaining additional licenses.

## Registered Nurses and Licensed Practical/Vocational Nurses

In 2018 and beyond, workforce mobility will be vital for patients' access to care and nurses' access to jobs as studies predict both shortages and surpluses in the nursing workforce. Currently, the number of employed registered nurses (RNs) per population in each state varies widely, from fewer than 700 RNs per 100,000 population in Nevada to over 1,500 RNs per 100,000 in the District of Columbia (U.S. Department of Labor, Bureau of Labor Statistics, 2017a; U.S. Census Bureau, 2017). Other states with approximately 700 RNs per 100,000 people are California, Georgia, Oklahoma, and Utah. Conversely, South Dakota (1,402 per 100,000), Massachusetts (1,250 per 100,000), and Delaware (1,189 per 100,000) have the highest ratios of employed RNs per population along with the District of

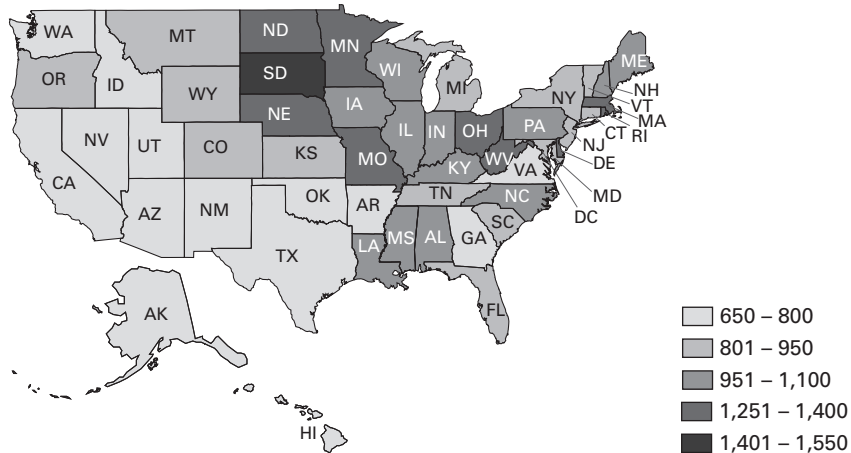
Columbia. Appendix B provides a detailed portrayal of the distribution of RNs and licensed practical nurses/vocational nurses (LPNs/VNs) across the country.

The ratio of employed LPNs/VNs is between 65 and 70 per 100,000 people in Alaska, Oregon, and Utah and over 400 per 100,000 in Arkansas and Louisiana (U.S. Department of Labor, 2017a; U.S. Census Bureau, 2017). States with shortages include Maine and most of the western states except for California, which has slightly more VNs per 100,000 population than its neighboring states. (Figure 1 provides a broad comparison of the numbers of RNs and LPNs across the country.)

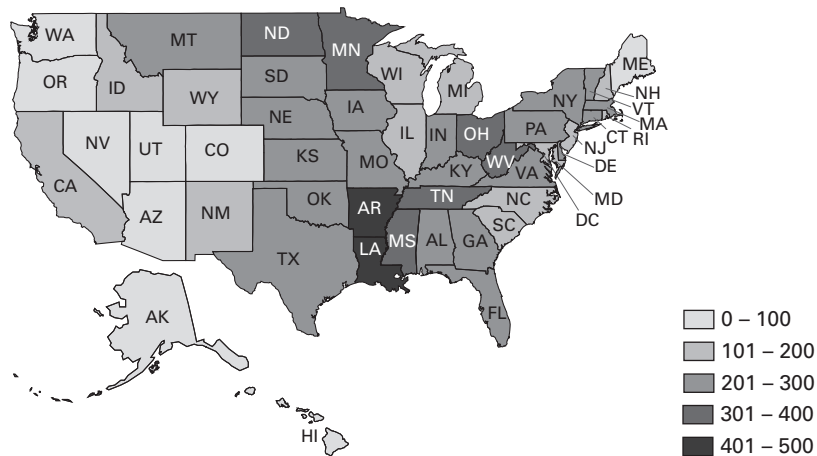
FIGURE 1

**RN and LPN/VN Employment by State\***

**RN**



**LPN/VN**



\*Employed RNs and LPN/VNs per 100,000 people by state  
 Source: U.S. Department of Labor, 2017; U.S. Census Bureau, 2017.

A number of studies published in 2017 indicated that the nursing workforce needs will continue to fluctuate according to state and region of the country. In 2017, the Health Resources and Services Administration (HRSA) released national projections for the U.S. nursing workforce through 2030 (HRSA, 2017a). Projections made from the Health Workforce Microsimulation Model used nurse data from the American Community Survey along with information reflecting the economy and labor markets. The model estimated the growth in RN supply (39%) will outpace the growth in RN demand (28%) by 2030 resulting in an excess of almost 300,000 RNs nationally. For LPNs, the growth in supply is estimated to be 26% while the growth in demand is expected to be 44%. This imbalance could result in national-level shortage of 151,000 LPNs by 2030; however, the report indicates a shortage of this magnitude is unlikely because LPNs can be educated relatively quickly.

According to the HRSA report (2017) inequitable distributions of nurses exist across states. Seven states are projected to have a RN shortage, and 33 states are projected to have a LPN shortage by 2030. The greatest shortages of RNs are predicted in California, Texas, New Jersey, and South Carolina. Texas and Pennsylvania are expected to have the greatest LPN shortages. Florida, Ohio, Virginia, and New York could expect a surplus of RNs. A LPN surplus is projected for Ohio and California. HRSA's proposed solution is optimal

migration (i.e., nurses moving to states where the in-state supply is less than demand). Thus, nurses would move to or work in areas of greater need. The distribution of the nursing workforce is likely to improve as more states join the eNLC.

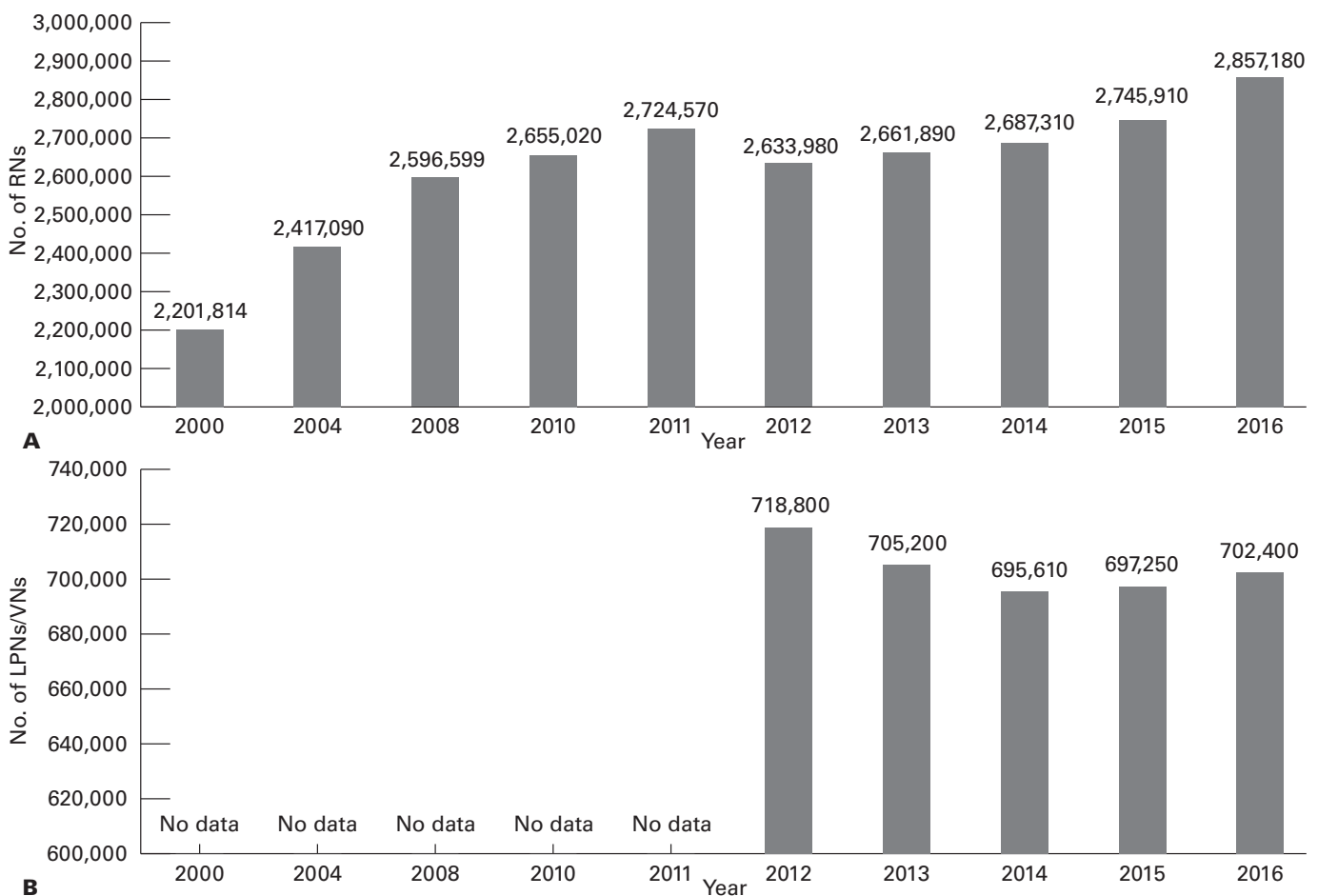
Buerhaus, Skinner, Auerbach, and Staiger (2017) identified four factors affecting the supply and demand of U.S. nurses in the future: (a) aging baby boomers, (b) the number of nurses retiring, (c) health care reform, and (d) the physician shortage. They also forecast regional shortages, rather than a national shortage. The aging baby boomers may exceed both the clinical capacity of the nursing workforce and the number of new graduates with geriatric expertise. The rate at which RNs retire from the workforce could reduce the number of nurses available, particularly in the New England and Pacific Regions (where the number of RNs per capita is lowest), as well as decrease the overall experience level of the workforce. Changes to the Patient Protection and Affordable Care Act (ACA, 2010), such as provisions to increase efficiency and a shift toward value-based purchasing, could result in greater recognition of the cost efficiency of nurses and the expanded roles of RNs in Medicare accountable care organizations. Finally, the physician shortage (Streeter, Zangaro, & Chattopadhyay, 2017) is likely to increase demand for nurses providing primary care, particularly to rural and vulnerable populations.

As of November 23, 2017, the U.S. workforce consisted of 4,015,250 RNs and 922,196 LPNs/VNs\* (NCSBN, 2017e). Of these, 2,857,180 RNs and 702,400 LPNs/VNs were employed in the United States as of May 2016, the most recent statistics available (U.S. Department of Labor, Bureau of Labor Statistics, 2017a).

Although employment data are not as recent as licensing data, they show that the number of employed RNs in the United States has steadily increased since 2012 (Figure 2a), whereas the number of employed LPN/VNs, despite a slight rise from 2014 to 2016, has decreased substantially since 2012 (Figure 2b).

FIGURE 2

**Number of Employed RNs and LPNs/VNs in the United States, 2000–2016**



Source: The data for years 2010 - 2016 are from the U.S. Bureau of Labor Statistics Occupational Employment Statistics (2017a; 2017b). The data for 2000, 2004, and 2008 in the RN graph are from the U.S. Department of Health and Human Services Health Resources Services Administration's National Sample Survey of Registered Nurses (2010).

\* Data regarding all Oklahoma and Hawaii nurses and LPNs/VNs in Louisiana were unavailable and are not included.

The predominant employers of RNs and LPNs/VNs will be hospitals and long-term care facilities, respectively. According to the most recent data from the U.S. Department of Labor, Bureau of Labor Statistics, RNs held an estimated 3 million jobs in the United States in 2016. Of those, 61% were in hospitals. Hospitals were followed by ambulatory health services (18%), nursing and residential facilities (7%), government facilities (5%), and educational services (3%). The same data showed that LPNs/VNs held approximately 724,500 jobs in 2016. The largest employers of these nurses were nursing and residential care facilities (38%), hospitals (16%), physician offices (13%), home health care services (12%), and government facilities (7%) (U.S. Department of Labor, Bureau of Labor Statistics, 2017a).

It is anticipated that a greater proportion of nursing employment will be seen in ambulatory and home care settings as health care shifts to those settings (Bauer & Bodenheimer, 2017). In fact, Bauer and Bodenheimer (2017) predict a dramatic shift in the RN role in primary care as the demand for primary care providers and services increases alongside payment models that allow for add-on payments for RN-delivered services in primary care settings. As primary care practices use team models to greater extent, the scope of RNs in primary care will include managing chronic disease, leading complex care management teams, and coordinating care between the primary care practice and communities (Bauer & Bodenheimer, 2017).

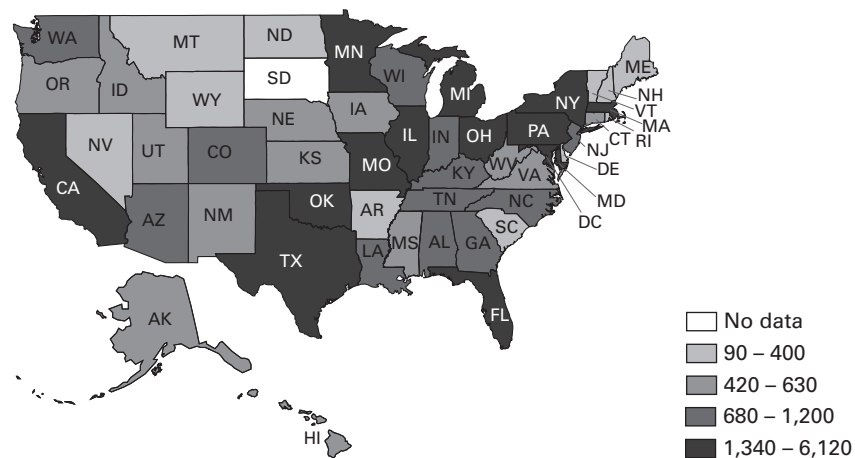
## Emerging Members of the Health Care Team

### Community Health Workers

As new health care models move care into the community setting and as the need for providers in rural and health shortage areas increases, some RN and LPN responsibilities may be provided by nonnursing personnel such as community health workers (CHWs). As of May 2016, 51,900 CHWs were working in the United States, with the highest levels of employment in individual and family services, local government, outpatient care centers, general medical and surgical hospitals, and physician offices (United States Department of Labor, Bureau of Labor Statistics, 2017c). Figure 3 depicts employment of CHWs by state. States with the highest employment of CHWs include California, New York, Texas, Massachusetts, and Illinois (United States Department of Labor, Bureau of Labor Statistics, 2017c).

FIGURE 3

### Employment of Community Health Workers by State, May 2016



Source: United States Department of Labor, Bureau of Labor Statistics, 2017c.

CHWs differ from home health aides, who may assist with activities of daily living, and from certified nurse assistants (CNAs), who may assist in carrying out a nursing plan of care. Community health workers are often part of the patient's community and usually share the language, ethnicity, and life experiences of their patients. This commonality helps them be uniquely valued by both the patient and the health care team (Rural Health Information Hub, 2017). In 2017, CHWs gained federal recognition for their ability to help address social determinants of health (Malcarney, Pittman, Quigley, Horton, & Seiler, 2017). CHWs are more likely to have "linguistic and cultural concordance" with their patients, which contributes to their effectiveness in reaching underserved communities and addressing health disparities (Malcarney et al., 2017; Chapman & Blash, 2017).

Job responsibilities for CHWs often include home visits, follow-up after acute care discharge, monitoring chronic diseases, and educating patients in the management of their conditions. They also act as specialists who educate the community on best practices for specific conditions, provide outreach and convene disparate stakeholders to coordinate a targeted outreach effort. Typical competencies