The U.S. Nursing Workforce: Trends in Supply and Education – Results in Brief

Understanding the supply, distribution, and educational pipeline of nurses is an important tool to inform the programs and policies that will ensure access to care and an effective health care system. This brief analyzes data from a variety of sources to present recent trends and the current status of the registered nurse (RN) and licensed practical nurse (LPN) workforces.

The Current Supply of Nurses and Trends Over Time

There were 2.8 million RNs (including advanced practice RNs) and 690,000 LPNs working in the field of nursing or seeking nursing employment in 2008 to 2010. About 445,000 RNs (16 percent) and 166,000 LPNs (24 percent) lived in rural areas. The per capita distribution of RNs varied substantially across states (see Figure 1).

Figure 1. The RN Workforce per 100,000 Population, by State

The nursing workforce grew substantially in the past decade, with RNs growing by more than 500,000 (24 percent) and LPNs by more than 90,000 (16 percent), as shown in Figure 2.

Data Source: HRSA analysis of the American Community Survey (ACS) 2008-2010 three-year file
Growth in the nursing workforce outpaced growth in the U.S. population. The number of RNs per 100,000 population (per capita) increased by nearly 14 percent, and the number of LPNs per capita increased by about 6 percent.

Other key findings about changes in the nurse supply over the past decade include:

- **Education**: Currently, about 55 percent of the RN workforce holds a bachelor’s or higher degree. An associate’s degree in nursing was the first nursing degree for many of these nurses. The percentage of the RN workforce holding a bachelor’s or higher degree increased from 50 to 55 over the past decade, a 10-percent increase.

- **Diversity**: RNs and LPNs are slowly becoming more diverse over time. The proportion of non-white RNs increased from 20 to 25 percent during the past decade, a 25-percent increase. The proportion of men in the RN workforce increased from 8 to 9 percent, a 12.5-percent increase.

- **Age**: Owing to strong growth in new entrants, the absolute number of RNs younger than 30 has increased. Nevertheless, the average age of nurses has also increased slightly, and about one-third of the nursing workforce is older than 50.

- **Workplace**: The majority of RNs (63 percent) are providing inpatient and outpatient care in hospitals. The distribution of RNs across settings held relatively steady over
the past decade. However, while the proportion of RNs in hospitals held steady, the number of RNs working in hospitals increased by more than 350,000 (about 25 percent). In contrast, fewer than one-third of LPNs (29 percent) work in hospitals, and that proportion has declined slightly over the past decade. A higher percentage of LPNs now work in skilled nursing facilities (31 percent) than in hospitals.

The RN and LPN Pipeline

The nursing pipeline, measured by the number of individuals who pass national nursing licensing exams, grew substantially from 2001 to 2011. In 2011, more than 142,000 new graduate RNs passed the NCLEX-RN®, compared with 68,561 in 2001 (see Figure 3). LPN passers grew by 80 percent over the same time period.

Figure 3. NCLEX-RN Passers, 2001 to 2011

Among first-time test takers, the number of NCLEX-RN candidates with a bachelor’s degree more than doubled, from 24,832 individuals in 2001 to 58,246 in 2011. Associate’s degree NCLEX-RN candidates grew by 99 percent, from 41,567 in 2001 to 82,763 in 2011. RN candidates without a bachelor’s degree continue to constitute the majority of all RN candidates (60 percent in 2011). Figure 4 presents the annual number of candidates, by degree type.
The number of internationally educated RNs passing the NCLEX fluctuated significantly from 2001 to 2011. While the number of passers increased steadily each year from 2001 to 2007, the annual number of internationally educated NCLEX passers has dropped since 2007 and was 6,100 in 2011.

Nearly 28,000 RNs were awarded a post-licensure bachelor’s in nursing (RN-BSN) in 2011, and another 26,200 were awarded master’s or doctoral degrees. There has been an estimated 86-percent increase in the annual number of RN-BSN graduates, and a 67-percent increase in graduate degree awards, over just the past four years. However, the annual number of post-licensure graduates is still too small, and the rapid growth too recent, to have generated large increases in the portion of the workforce prepared with bachelor’s or graduate degrees.

Nurses will continue to play a critical, growing role in health care delivery. In the coming years, HRSA will monitor the key indicators tracked in this brief, including the supply, distribution, and educational pipeline. It will be important to follow these trends closely as the nation's demographic and health systems evolve.