Washington State Licensed Practical Nurse Supply and Demand Projections: 2007-2026

Background and Methods
This report describes trends in licensed practical nurse (LPN) supply and demand for Washington State from 2007 through 2026. Factors affecting supply include students completing Washington LPN education programs, immigration from other states, re-activation of licensure after license expiration, deaths, license expirations due to individuals leaving nursing careers or pursuing other health care occupations, age-related retirements, out-migration to other states, and LPNs not employed in nursing. LPN demand factors include numbers of employed LPNs and vacant LPN positions. Based on these factors, we estimated baseline supply and demand in 2007 as well as rates of change over time, and projected supply and demand to 2026 for licensed and practicing LPNs.

LPN education capacity is the factor under policy control that appears to have the largest impact on state LPN supply. Four policy scenarios for the projections were (1) maintaining annual education capacity at the current levels, (2) increasing annual capacity by 100 LPN education completions as of 2011, (3) increasing annual education capacity by 200 LPN completions as of 2011, and (4) decreasing annual education capacity by 100 completions as of 2011.

Major Findings
- If the 2007 rate of completions from LPN schools in Washington is sustained, the projected supply of practicing LPNs in 2026 will be more than 3,500 LPNs (24%) below estimated demand.
- If the LPN education completion rate increases by 100 LPNs in 2011 and this increase is sustained through 2026, the projected supply of practicing LPNs will increase over the next two decades but still be 3,000 LPNs (19%) below estimated demand in 2026.
- If the LPN education completion rates increase by 200 LPNs in 2011 and this increase is sustained through 2026, the projected supply of practicing LPNs will increase over the next two decades but still be 2,300 LPNs (14%) short of demand in 2026.
- If the LPN education completion rate declines by 100 LPNs in 2011 and this decrease is sustained, the number of LPNs is projected to be nearly 4,500 LPNs (29%) less than estimated demand in 2026.
As Washington’s population grows, the number of LPNs needed to maintain the same LPN-to-population ratio increases. None of the alternative LPN projection scenarios in this report, even those that increase education output, produce adequate numbers of LPNs to reach in 2026 the same LPN-to-population ratio the state had in 2007.

### Discussion and Policy Implications

Other states have determined that the gap between current LPN supply and demand will grow over the next 20 years. Rural locations, including those in Washington, are likely to see greater shortages because their populations are older, on average, than urban areas. This growing elderly population has greater need for services, including long-term care, and LPNs are the primary nursing providers in elder care settings. Major changes in health care delivery systems or the economic environment could alter the rate of increase in LPN demand. In addition, there is growing support to increase education for nurses at all levels and the impact of this on LPN education is unclear.

The registered nurse and LPN workforces are closely related, and growing RN demand may exacerbate the LPN shortage if hiring practices shift to replace RNs with LPNs. LPN education is a critical entry point into the nursing profession, and articulation paths between LPN education and other nursing education programs should be simple, clear and explicit. While encouraging LPNs to pursue RN careers may shorten their tenure as LPNs, the potential for professional growth may encourage more people to enter nursing career pathways as LPNs.

This report is a planning tool to inform LPN workforce policy by providing information about the factors that affect LPN supply and demand. It is intended to help health care planners and policy makers develop strategies to reduce or avoid LPN shortages over the next decades.