

Key Findings from the NC Nursecast Supply and Demand Model

Overarching:

- By 2033, North Carolina faces an estimated shortage of nearly 12,500 registered nurses and slightly more than 5,000 LPNs.

Employment Setting Projections:

RNs:

- The largest numeric shortfalls for RNs are projected to occur in hospitals where demand could exceed supply by nearly 10,000 positions by 2033.
- The second largest projected shortage of RNs in absolute numbers and the largest shortage as the percent of the workforce is projected to occur in nursing home, extended care, and assisted living facilities.

LPNs

- Nursing home, extended care, and assisted living facilities employ the greatest number of LPNs and these settings face a nearly 50% forecasted shortage of LPNs by 2033.
- Hospitals also face a large percentage shortfall (31.7%) of LPNs by 2033.

Regional Projections

- Most regions of the state are projected to face RN shortages except for the Southeast region; all regions will face LPN shortages.
- Large metropolitan areas face significantly higher RN shortages than non-metro areas; both metro and non-metro areas face similar levels of LPN shortages.
- Wake AHEC (including Raleigh-Durham) and Northwest AHEC (including Winston-Salem) face the largest RN shortages.
- The Mountain AHEC (western NC) and Wake AHEC face the largest LPN shortages

NC Nursecast is an interactive, web-based tool that forecasts future supply and demand for Registered Nurses (RNs) and Licensed Practical Nurses (LPNs) in North Carolina.

Access it at: <https://ncnursecast.unc.edu>

November 19, 2021

Key Findings from the NC Nursecast Supply and Demand Model

Alternative, “what if” scenarios and how they change the baseline model predictions

Scenarios Likely to Increase Nurse Shortage

- **What if nurses exit the workforce 2 years early?**
 - o The shortage worsens to 16,700 RNs by 2033
 - o The shortage worsens to 5,500 LPNs by 2033
- **What if nurses exit the workforce 5 years early?**
 - o The shortage worsens to more than 21,000 RNs by 2033
 - o The shortage increases to 6,000 LPNs by 2033
- **What if the supply of out of state nurses decreases by 2.5%?**
 - o The shortage of worsens to 14,400 RNs by 2033
 - o The shortage worsens to 5,250 LPNs by 2033

Scenarios Likely to Improve or Decrease Nurse Shortage

- **What if nurses remain in the workforce two years longer than expected?**
 - o The RN shortage improves from 12,500 to 11,500 by 2033
 - o The LPN shortage remains similar, going from 5,000 to 4,900 by 2033
- **What if the number of nurse graduates increases by 10%?**
 - o The RN shortage improves slightly from 12,500 to 10,000 by 2033
 - o The LPN shortage remains similar, going from 5,000 at the baseline to 4,500 by 2033

Takeaway: Nursing home, extended care, and assisted living facilities employ the greatest number of LPNs and these settings face a nearly 50% forecasted shortage of LPNs by 2033.

What about COVID? We do not know the effect that COVID will have on the supply and demand of nurses in NC. Reports of burnout, nurses shifting to travel positions for higher pay, nurses returning to work, students wanting to become nurses, and other factors will affect future nursing supply and demand.

In one possible scenario, if we combine early exits from the nurse workforce and increased competition from other states with increased enrollment in nursing programs:

- The RN shortage worsens from 12,500 to 18,600 by 2033
- The LPN shortage worsens from 5,000 to 5,800 by 2033