



Unpacking HRSA’s Registered Nurse Supply and Demand Projections for South Carolina, 2020-2035

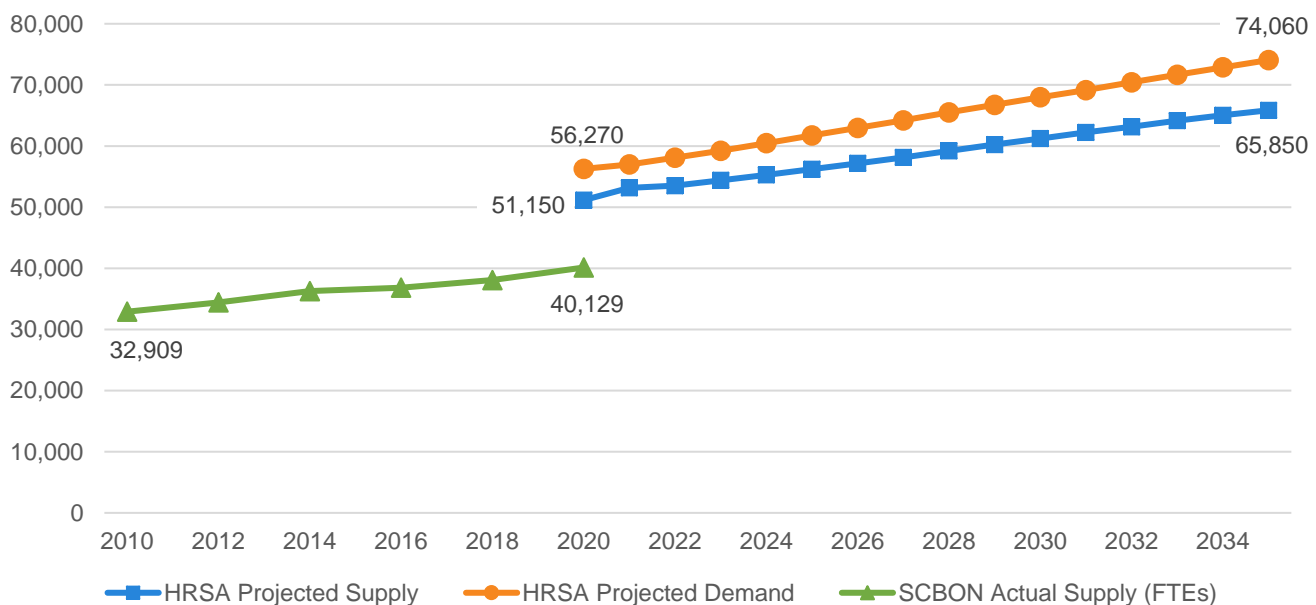
Introduction

In December 2022, the US Health Resources and Services Administration (HRSA) updated their healthcare workforce supply and demand projections.¹ The projections are based on the Health Workforce Simulation Model (HWSM), which incorporates factors like changing population size, demographics, and location of the U.S. population; new entrants and exiting providers in various occupations; and differing levels of access to care.

The model predicts a national shortage of 78,610 full-time equivalent (FTE) registered nurses (RNs) by 2025 and a shortage of 63,720 FTE RNs by 2030. South Carolina is projected to have the 10th largest shortage in the US by 2035, behind Washington, Georgia, California, Oregon, Michigan, Idaho, Louisiana, North Carolina, and New Jersey. Previous HRSA projections predicted that South Carolina would have the 4th worst shortage in the US by 2030.²

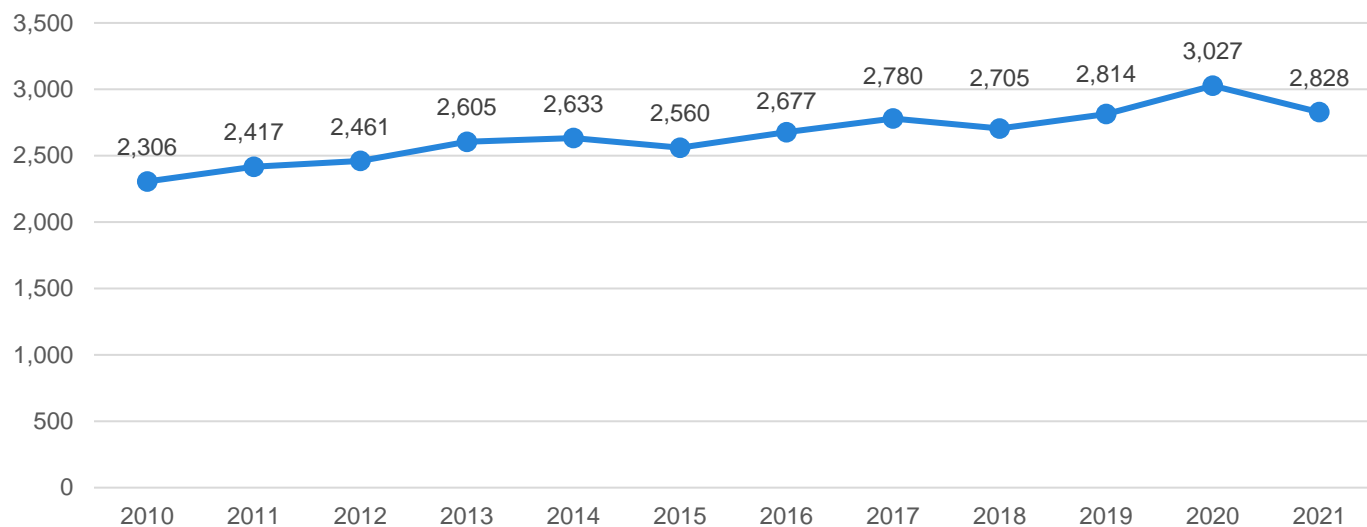
This brief describes the projected supply of and demand for RNs in South Carolina from 2020 to 2035, as well as the actual supply of RNs and RN graduates from South Carolina nursing education programs.

Figure 1. Actual Supply of RN FTEs in South Carolina, 2010-2020, and Projected Supply and Demand of RN FTEs in South Carolina, 2020-2035



Notes: The actual supply of active RNs is in FTEs, not headcount. FTEs are calculated by dividing the self-reported number of hours worked per week and primary and secondary positions by 40. **Sources:** Projected Nurse Supply and Demand: Workforce Projections; U.S. Health Resources and Services Administration. <https://data.hrsa.gov/topics/health-workforce/workforce-projections>, accessed 1/3/2023. Health professions data: SC Office for Healthcare Workforce, derived from data collected by the SC Board of Nursing (SCBON) in the SC Department of Labor, Licensing and Regulation and housed by the SC Revenue and Fiscal Affairs Office. All data are self-reported by the licensee at time of initial application for licensure.

Figure 2. Number of Pre-Licensure RN Graduates from South Carolina Nursing Programs, 2008-2021



Notes: In an attempt to count only pre-licensure RN graduates, only award level codes “3 – Associates degrees,” “4 - Awards of at least 2 but less than 4 academic years,” and “5 - Bachelors degrees” are included. This may mean some South Carolina graduates are excluded – there is one master’s-level RN entry program in the state. **Sources:** South Carolina RN Graduates: Integrated Postsecondary Education Data System; National Center for Education Statistics. <https://nces.ed.gov/ipeds/use-the-data>, accessed 1/3/2023.

Key Findings

- The HRSA model shows a supply of 56,210 RN FTEs and a demand for 61,730 RN FTEs in 2025, leaving a deficit of 5,520 RN FTEs and 8.9% of projected demand unmet. By 2035, the supply of RN FTEs is projected to grow to 65,850 while the demand grows to 74,060, leaving a deficit of 8,210 RN FTEs and 11.1% of demand unmet.
- The updated HRSA model overestimates the supply of RNs in South Carolina. The model shows a supply of 51,150 RN FTEs in 2020, while South Carolina licensure files show 40,129 RN FTEs.
- While the South Carolina population grew by 12.5% from 2010 to 2020, the supply of RNs actively practicing in the state grew by 20.8%.³
- Like the supply of RNs, the number of pre-licensure graduates from RN programs in South Carolina has seen relatively steady growth since 2010.

Implications

Nurses comprise the largest part of the South Carolina healthcare workforce, and a nursing shortage occurs when the demand for nurses exceeds the supply. There are many possible causes of a shortage, including nurses retiring or leaving the profession, a lack of trained nurses, and increased patient acuity. The interplay of these factors, and our inability to predict how they will change over time, make it very difficult to create accurate projections.

Despite these limitations to these supply and demand projections, they are an important piece to help understand the state of the nursing workforce. Understanding the supply and demand of RNs in the state, as well as their demographic, education, and employment characteristics, is critical for effective workforce planning, decision-making, and policy development, particularly in a time of labor and economic instability. For more information on the nursing workforce in South Carolina, please see our most recent report on the RN workforce: <https://www.scahec.net/scohw/reports/134>.

Limitations

- The projections are based on the Health Workforce Simulation Model, which uses state-level counts of active RN licenses in 2020 from the National Council of State Boards of Nursing (NCSBN) and the National Sample Survey of Registered Nurses (NSSRN), with FTE characteristics modeled from the American Community Survey (ACS). The HRSA model overestimates the supply of RNs in South Carolina. HRSA states that if the ACS overestimates the FTE supply of nurses, it might also overestimate demand by a similar percentage.
- The HRSA model accounts for Compact nurses by reported practice location in the NCSBN and NSSRN data. South Carolina licensure data do not include RNs who are working in SC but are licensed in a different Compact state.
- Although the projections include some data from 2020, the full impact of the COVID-19 on the nursing workforce is not captured in the available data. There is a lack of data on how care delivery patterns may change over time. There has been a large increase in the use of travel nurses⁴, and many nurses are leaving or considering leaving the profession altogether.⁵
- Using national data sources in projection models may not accurately represent regional utilization patterns or workforce characteristics.
- Accuracy demands some knowledge of local staffing customs, provider and facility availability, and how patient populations differ in their service use patterns.
- When available, regional data sources should be incorporated into forecast models as much as possible.

Suggested citation

Campbell C, Gaul K. Unpacking HRSA's Registered Nurse Supply and Demand Projections for South Carolina, 2020-2035. Charleston, SC: South Carolina Office for Healthcare Workforce, South Carolina Area Health Education Consortium. January 2023.

References

- ¹ For more information on the workforce projections model and data, see <https://data.hrsa.gov/topics/health-workforce/workforce-projections>. For briefs on the workforce projections, see <https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand>. For technical documentation, see <https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/technical-documentation>
- ² U.S. Health Resources and Services Administration (2018). Long-Term Services and Reports: Nursing Workforce Demand Projections 2015-2030. <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/hrsa-ltss-nursing-report.pdf>
- ³ See South Carolina Health Professions Data Books at <https://www.scahec.net/scohw/reports>
- ⁴ Yang, YT, Mason DJ (2022). COVID-19's Impact On Nursing Shortages, The Rise Of Travel Nurses, And Price Gouging. Health Affairs Forefront. <https://www.healthaffairs.org/doi/10.1377/forefront.20220125.695159/>
- ⁵ McKinsey & Company (2022). Surveyed Nurses Consider Leaving Direct Patient Care at Elevated Rates <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/surveyed-nurses-consider-leaving-direct-patient-care-at-elevated-rates>