Nurse Workforce Projections, 2020-2035

November 2022

This brief contains highlights of workforce projections for the nursing workforce in the United States.

These estimates were generated using HRSA's Health Workforce Simulation Model (HWSM) and start with the year 2020 and go through 2035. The primary function of the HWSM is to assess the adequacy of the nation's projected workforce supply to meet the demand.[1]

Full data on the workforce projections will be available in the Workforce Projections Dashboard.

Key Results and Takeaways

These projections were generated using historical data up to and including some data from 2020. The COVID-19 pandemic had a significant impact on the nursing workforce, which may not be fully captured in the available data.

- Nationally, there is a projected shortage of 78,610 full-time equivalent (FTE) RNs in 2025 and a shortage of 63,720 FTE RNs in 2030 (see **Exhibits 1a-1c**).[2] There is a projected excess supply of approximately 16,180 FTE RNs in 2035. However, this assumes that historical patterns of attrition, graduation, and labor force participation remain the same over the forecast period.[3] However, as noted, the data underlying these estimates are from 2020, so the full impact of the pandemic on the nursing profession will not be able to be estimated until additional years of data are available.

- Geographic distribution remains an issue for the nursing profession. Supply adequacy varies considerably across states, ranging from a shortage of 26% in Washington to a projected 48% oversupply in North Dakota in 2035.

- The ten states with the largest projected shortage in 2035 are Washington (26%), Georgia (21%), California (18%), Oregon (16%), Michigan (15%), Idaho (15%), Louisiana (13%), North Carolina (13%), New Jersey (12%), and South Carolina (11%).[4]

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[1] For a detailed explanation of the data, methods, and assumptions of the model, including the definitions of supply and demand, refer the HWSM technical documentation.

[2] An FTE is defined as working 40 hours per week.

[3] NCHWA also reports projections under alternative scenarios of supply, such as varying graduation rates and retirement ages, and of demand including improved access to care. The projected estimates under each scenario are available at Workforce Projections Dashboard.

[4] For state-level projections, see the Workforce Projections Dashboard. Shortage percentages are calculated as 1 minus supply adequacy, which are calculated as projected supply divided by projected demand.

- Metro areas are projected to have a small surplus of RNs (1% in 2035), while shortages are projected for nonmetro areas (2% in 2035). Nonmetro areas are projected to have larger shortages in 2025 (13%) and 2030 (9%).

Exhibit 1a. Projected Supply and Demand for Selected Nursing Occupations, 2025

Projection Estimates	Registered Nurses	Licensed Practical Nurses	Nurse Practitioners	Nurse Anesthetists	Nurse Midwives
Supply	3,381,110	654,680	451,430	43,010	13,490
Demand	3,459,720	686,450	324,850	37,170	12,490
Percent Adequacy	98%	95%	139%	116%	108%

Exhibit 1b. Projected Supply and Demand for Selected Nursing Occupations, 2030

Projection Estimates	Registered Nurses	Licensed Practical Nurses	Nurse Practitioners	Nurse Anesthetists	Nurse Midwives
Supply	3,619,040	664,520	595,900	53,410	14,970
Demand	3,682,760	750,280	343,660	38,850	12,680
Percent Adequacy	98%	89%	173%	137%	118%

Exhibit 1c. Projected Supply and Demand for Selected Nursing Occupations, 2035

Projection Estimates	Registered Nurses	Licensed Practical Nurses	Nurse Practitioners	Nurse Anesthetists	Nurse Midwives
Supply	3,905,950	674,320	738,640	63,640	16,800
Demand	3,889,770	815,900	360,050	40,180	12,850
Percent Adequacy	100%	83%	205%	158%	131%

Notes: Demand and supply estimates and projections are in full-time equivalents (FTEs), defined as working 40 hours a week. FTE estimates may differ from estimates of the headcounts of the health workforce. Percent adequacy is calculated by taking projected supply divided by projected demand.

- The demand for licensed practical and vocational nurses is projected to grow faster than supply between 2020 and 2035, resulting in a projected shortage of 141,580 LPN FTEs in 2035. Nationwide, the projected supply of LPNs in 2035 is sufficient to meet just 83% of the demand for LPNs, compared to 95% in 2025.

- As with RNs, the adequacy of supply for LPNs varies considerably across states, ranging from 12% (an 88% shortage) in Alaska to 151% (a 51% oversupply) in Arkansas in 2035.

- The supply of nurse practitioners (NPs) is projected to exceed projected demand over the projection period. By 2035, the supply of NPs will be more than double the projected demand.

- Nationally, for NPs, supply adequacy is higher in nonmetro areas than in metro areas in 2035. This may reflect a greater reliance on NPs to provide certain services due to projected shortages in primary care and other physicians.[5]

- Similarly, the model projects an excess supply of nurse anesthetists and nurse midwives nationwide.

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[5] The Workforce Projections Dashboard reports projections of the supply of and demand for physicians across 36 distinct specialties.

These projections were generated using some data from the period of the COVID-19 pandemic. The pandemic impacted the population seeking care, the workforce providing care, and the data available for both. These projections should be interpreted with caution as the behavior of those seeking care and the size and composition of the workforce providing care during the pandemic may not be fully reflected in these projections. See the HWSM technical documentation for details on the methodology and datasets used to generate these projections.

For full data on the workforce projections, see the Workforce Projections Dashboard. You can access a webinar about the Workforce Projections Dashboard that shows how to use it. You can also download the data from the dashboard in spreadsheet form.