

Workforce Projections Dashboard

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About the Health Workforce Supply and Demand Projections Dashboards

The Workforce Projections Dashboard is an interactive Tableau Dashboard that shows the projection of the supply of and demand for healthcare workers across the United States. These projections are from the National Center for Health Workforce Analysis (NCHWA), which is part of the Health Resources and Services Administration (HRSA) at the U.S. Department of Health and Human Services. More on these projections can be found at <https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand>.

Projections are based on the Health Workforce Simulation Model (HWSM). This is an integrated microsimulation model that estimates the current and future supply of and demand for health care workers by occupation, geographic area, and year. The HWSM incorporates factors like the 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 full projections methodology can be found at <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/technical-documentation-health-workforce-simulation-model.pdf>.

The key data presented are:

- **Supply** is the number of workers active in the workforce, which consists of people working and people actively seeking employment.
- **Demand** is the number of workers required to provide a level of services that will be utilized given patient health-seeking behavior and ability/willingness to pay for services.
- **Percent Adequacy** is the relationship between the projected future supply and projected future demand. It is the quotient of supply divided by demand. For many occupations, the estimated supply and estimated demand in the base year are assumed to be roughly in equilibrium. For these occupations, a percent adequacy of greater than 100% does not necessarily mean there will be an oversupply of a health profession. For all occupations, percent adequacy of greater than 100% does not account for potential maldistribution at smaller geographic areas.

Data are presented at both the national and state level (state data are available for selected occupations). Click the “Supply & Demand Trends” tab to view national data. Click the “U.S. Map” tab to view state data. In the What If? scenarios, a user can choose from predefined scenarios that show how a particular change would affect the supply and demand in an occupation. For example, one scenario models what would happen if 10% fewer graduates enter the workforce annually. The different types of What If? scenarios available are outlined later in this document.

The following page has detailed steps on how to access different data within the dashboard.

Accessing data from the Dashboard

1. The latest version of the dashboard can be accessed at <https://data.hrsa.gov/topics/health-workforce/workforce-projections>.
2. Data in the dashboard is organized by occupation. Choose one of the following Occupation Groups and then an occupation.
 - a. For certain occupations, you can also select the type of Rurality.

Allied Health	Behavioral Health	Long-Term Care	Oral Health	Primary Care	Women's Health
Chiropractors	Adult Psychiatrists	Home Health Aides	Dental Hygienists	Family Medicine	Nurse Midwives
Community Health Workers	Addiction Counselors	Licensed Practical Nurses	Endodontists	General Internal Medicine	Nurse Practitioners (WH)
EMTs and Paramedics	Child Psychiatry	Nursing Assistants	General Dentists	Geriatric Medicine	Obstetrics & Gynecology
Medical and Clinical Laboratory Technologists	Marriage and Family Therapists	Personal Care Aides	Oral Surgeons	Nurse Practitioner (PC)	Physician Assistants (WH)
Occupational Therapists	Mental Health Counselors	Psychiatric Aides	Orthodontists	Pediatric Medicine	
Opticians, Dispensing	Psychiatric Nurse Practitioners	Registered Nurses	Other Dentists	Physician Assistant (PC)	
Optometrists	Psychiatric Physician Assistants		Pediatric Dentists		
Pharmacists	Psychologists		Periodontists		
Physical Therapists	School Counselors				
Podiatrists	Social Workers				
Registered Dieticians					
Respiratory Therapists					

3. Click on one of the 3 tabs to access different types of data;
 - a. **Supply & Demand trends** shows general supply and demand for the occupation
 - b. **U.S. Map** shows supply and demand by state
 - c. **What if? Scenarios** to see predefined scenarios of how changes to specific inputs would affect supply and demand
4. Select the year range or year for the data
5. Hover over charts and states to see tip tools with more information
6. Repeat steps 2-5 to access data on different occupations and/or years.
7. Click on Download to save a view from the dashboard as an image, PDF, or PowerPoint.

What if? Scenarios

The alternative scenarios shown below are intended to be deviations from the Status Quo, and are not provided as “likely to occur” scenarios. They illustrate what would happen in the event of changes in the health care landscape in the U.S. More information on these alternatives can be found in the [technical documentation](#) for HRSA’s Health Workforce Simulation Model.

Supply

Status Quo scenario: The Status Quo supply projections model the continuation of current numbers of newly-trained health care workers and current patterns of labor force participation (attrition, being temporarily out of the workforce, and hours worked patterns).

Early Retirement: This hypothetical supply scenario is modeled to quantify what the supply of the health workforce would be if providers retired two years earlier, on average, relative to the Status Quo.

Delayed Retirement: This hypothetical supply scenario is modeled to quantify what the supply of the health workforce would be if providers delaying retirement by two years, on average, relative to Status Quo.

Fewer New Graduates: This hypothetical supply scenario is modeled to quantify what the supply of the health workforce would be if 10% fewer new graduates entered the workforce annually than the Status Quo.

More New Graduates: This hypothetical supply scenario is modeled to quantify what the supply of the health workforce would be if 10% more new graduates entered the workforce annually than the Status Quo.

Demand

Status Quo scenario: The Status Quo demand projections extrapolate current national health care use and delivery patterns by personal characteristics to the projected populations in the future.

Improved Access Scenarios: These hypothetical demand scenarios are modeled to quantify what demand for health care services and providers would be if populations that historically faced barriers to receiving health care services had improved access and reduced barriers to care. This scenario first identifies a population that likely faces few access barriers to care. It then simulates demand if people not in this population had care utilization rates like this population. See the following three scenarios:

Geographic Parity: This hypothetical demand scenario is modeled to quantify what demand for health care services and providers would be if the entire population had care utilization rates like people living in a metropolitan area.

Increased Insurance Coverage: This hypothetical demand scenario is modeled to quantify what demand for health care services and providers would be if the entire population had care utilization rates like people with insurance.

Racial Equity: This hypothetical demand scenario is modeled to quantify what demand for health care services and providers would be if the entire population had high care utilization rates like the non-Hispanic white population.

Improved Access (combination scenario)*: This hypothetical demand scenario is modeled to quantify what demand for health care services and providers would be if the entire population had care utilization rates like non-Hispanic white population with insurance, living in a metropolitan area. Due to nonlinear modeling, the sum of effects of individual access barriers above is close to, but not equal to, the effect of Improved Access.

* For Women's Health, the metropolitan/nonmetropolitan component of the Improved Access (combination scenario) was omitted.

Improved Population Health: This hypothetical demand scenario modeled potential long-term health impacts and health workforce demand implications of achieving the following population health goals: 1) sustained 5% body weight loss for overweight and obese adults; 2) improved blood pressure, cholesterol, and blood glucose levels for adults with elevated levels; and 3) smoking cessation for 25% of smokers.

Occupation groups available

Full reports for these occupation groups available are available at <https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand>.

Allied Health professionals and selected other occupations deliver health or related services pertaining to the identification, evaluation, and prevention of diseases and disorders; dietary and nutrition services; and rehabilitation and health systems management, among others.

Behavioral Health care includes care that addresses any behavioral problem, including mental health and substance abuse conditions, stress-linked physical symptoms, patient activation and health behaviors.

Long-Term Care includes long term assistance with activities of daily living (e.g., bathing, dressing, eating) and instrumental activities of daily living (e.g., meal preparation, medication

and money management) provided in homes.

Oral Health professions include general and specialty dentists and dental hygienists.

Primary Care workers in this study includes physicians, nurse practitioners (NPs), and physician assistants (PAs) practicing in primary care specialties: family medicine, general pediatric medicine, general internal medicine, and geriatric medicine. Hospitalists are not included.

Women's Health refers to the influence of sex and gender on health, wellness, disability, and disease status across the lifespan.

Data available (as of August 2021)

The table below shows when data are available as well as what type of data (supply, demand, and metro/nonmetro) are available.

Occupation groups	Years available	Supply	Demand	State	Metro and Nonmetro
Long-Term Care	2015-2030	No	Yes	Yes *	No
Allied Health	2016-2030	Yes	Yes	No	No
Behavioral Health	2017-2030	Yes	Yes	No	No
Oral Health	2017-2030	Yes	Yes	No	No
Primary Care	2018-2030	Yes	Yes	Yes	Yes
Women's Health	2018-2030	Yes	Yes	Yes	Yes

* For RNs and LPNs only.

Metro and Nonmetro

Metro is defined as a Metropolitan Statistical Area (MSA) at the county level as defined in 2010 Office of Management and Budget (OMB) Standards.

Nonmetro is defined as all counties that are not part of an MSA defined in 2010 OMB Standards.

Starting Supply and Demand

Current health care use and delivery patterns reflect the current supply of health workers. Hence, for many occupations modeled using HWSM, full-time equivalent (FTE) national demand equals national supply in the base year. This approach is common across health workforce models. (See Ono, Lafortune, and Schoenstein, <https://www.oecd-ilibrary.org/content/paper/5k44t787zcwb-en>).

The following occupations have different base year values for supply and demand:

- Adult Psychiatrists
- Child Psychiatry
- Family Medicine
- General Internal Medicine

For more information on why base year supply and demand differ for these occupations, see the full reports at <https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand>.

Using these data

All data from this dashboard are in the public domain and can be used freely. Data should be cited as coming from the Department of Health and Human Services, Health Resources and Services Administration, Health Workforce Projections. Please direct questions to NCHWAinquiries@hrsa.gov.