



# The U.S. Health Workforce Chartbook – In Brief

September 2018

This brief provides a summary on the size and characteristic estimates of 34 health occupations using 2015 data. The information is from *The U.S. Health Workforce Chartbook*, which includes data on a wide variety of health workers – including Physicians, Nurses, Dentists, Counselors, Physical Therapists, Laboratory Technicians, Nursing Assistants, and others.<sup>1</sup>

The health occupations discussed in this brief are classified based on the U.S. Government’s 2010 Standard Occupational Classification (SOC) system.<sup>2</sup> There are more than 15 million individuals in the entire 5-year (2011-2015) American Community Survey (ACS) Public Use Microdata Sample (PUMS).<sup>3</sup> These individuals represent an approximately 5 percent sample of the U.S. working-age population, devised by combining the 1 percent samples from the 2011 to 2015 ACS which uses self-reported occupations.<sup>4</sup> The PUMS allows estimation of the nation-wide health workforce across many occupations. The vast majority are employed in what the U.S. Office of Management and Budget defines as the “health sector,” which includes health settings such as hospitals, clinics, physician’s offices, and nursing homes. Individuals in health occupations may also work outside the health sector in settings such as local governments, schools, or insurance companies. The information provided in this brief includes individuals in health occupations that are both within and outside the health sector.

The table below includes the estimated total number of individuals in the occupation or occupational grouping and highlights some major demographical subcomponents – which include the percentage of whites, the percentage of females, the percentage of health workers older than age 55, and the highest and lowest number of workers per 100,000 in the working-age

## About the National Center for Health Workforce Analysis

The National Center for Health Workforce Analysis informs public and private sector decision makers on health workforce issues by expanding and improving health workforce data, disseminating workforce data to the public, and improving and updating projections of the supply and demand for health workers.

Visit the website:  
[Health Workforce Analysis](#)

<sup>1</sup> Some health occupations are not included or fully represented in the Chartbook because of data limitations. Only occupations that have 2010 Standard Occupational Classification (SOC) codes are included in this Chartbook. The report also does not include important health occupations because of the small size of the occupation, such as epidemiologists and other public health-oriented disciplines like laboratorians and environmental health professionals.

<sup>2</sup> The 2010 Standard Occupational Classification can be accessed at <https://www.bls.gov/soc/>

<sup>3</sup> HRSA analysis of the U.S. Census Bureau, American Community Survey (ACS) Public Use Microdata Sample (PUMS), 2011-2015

<sup>4</sup> Self-reported data have limitations. Some individuals may report the occupation for which they are trained or licensed even when they are not currently working the majority of their time in that occupation. The ACS does not collect data on licensure or professional certification. See Technical Documentation for additional details on ACS reporting limitations.

population across the U.S. states.<sup>5</sup> Also included in the table below are data on the number of graduates for 2015 from educational programs commonly associated with the reported occupations. These data are from the U.S. Department of Education Integrated Postsecondary Education Data System (IPEDS).<sup>6</sup> No graduate data are presented for occupations in which formal educational requirements are completed in institutions not reporting to IPEDS or vary substantially by state.

## **FINDINGS**

The largest health occupations or groupings are Registered Nurses (approximately 3,067,000); Nursing, Psychiatric, and Home Health Aides (2,845,000); Personal Care Aides (1,649,000); Physicians (961,000); and Licensed Practical and Licensed Vocational Nurses (852,000).

More than half of the 34 occupations or occupational groupings are greater than 70 percent female, with Dental Hygienists, Medical Secretaries, and Speech-Language Pathologists being more than 96-percent female.

There are significant variations in age across occupations, from Dentists and Psychologists with more than 38 percent over age 55 to Emergency Medical Technicians and Paramedics and Medical Assistant with lower than 10 percent over age 55.

Detailed information on demographics (including race and ethnicity data), workforce settings, and geographic distribution of the U.S. health workforce, as well as more information about the data, methods, and findings in this brief, can be found in *The U.S. Health Workforce Chartbook* and the Technical Documentation for the Chartbook at <https://bhw.hrsa.gov/health-workforce-analysis/research>.

---

<sup>5</sup> Occupations in the Chartbook are limited to the occupations as defined by the SOC as well as how the ACS collects and reports occupational data.

<sup>6</sup> The Integrated Postsecondary Education Data System (IPEDS) can be accessed at <https://nces.ed.gov/ipeds/>

## The U.S. Health Workforce

Occupation	Total Workforce, 2011-2015 <sup>7</sup>	White/Non-Hispanic (%)	Female (%)	>55 years old (%)	Range of State-Level Workers per 100,000 population <sup>8</sup>	Total New Graduates, 2015 <sup>9</sup>
<b>Part I: Clinicians</b>						
Physicians <sup>10</sup>	961,098	67.0%	34.9%	31.1%	194 - 662	23,657 <sup>11</sup>
Physician Assistants	125,771	72.7%	67.8%	14.2%	17 - 84	8,106
Registered Nurses <sup>12</sup>	3,067,256	73.6%	90.3%	25.5%	387 - 1820	223,369
Nurse Anesthetists	29,771	85.8%	57.7%	31.2%	2 - 32	1,819
Nurse-Midwives and Nurse Practitioners <sup>13</sup>	122,858	83.6%	91.8%	26.2%	16 - 113	15,933
LPN/LVN <sup>14</sup>	852,420	60.8%	90.6%	26.1%	142 - 603	49,152
Dentists	182,012	74.8%	27.4%	38.2%	36 - 109	5,883
Dental Hygienists	187,444	83.4%	96.4%	18.2%	38 - 123	8,354
Dental Assistants	347,689	62.1%	94.6%	10.2%	55 - 254	22,974
Pharmacists	316,183	70.4%	54.5%	24.2%	38 - 229	15,301
<b>Part II: Clinicians and Health Administration</b>						
Chiropractors	59,525	86.7%	28.2%	24.1%	4 - 68	2,544
Optometrists	38,233	78.4%	40.1%	30.9%	6 - 46	1,511
Opticians, Dispensing	63,415	75.9%	72.0%	26.3%	8 - 89	NA
Medical and Health Services Managers	696,024	72.7%	70.2%	29.7%	194 - 376	34,052
Medical Secretaries	794,765	72.5%	96.1%	30.5%	154 - 587	NA
Veterinarians	80,136	90.4%	55.2%	25.4%	21 - 67	2,815
<b>Part III: Technologists and Technicians and Aides and Assistants</b>						

<sup>7</sup> Total Workforce from HRSA analysis of the ACS PUMS, 2011-2015.

<sup>8</sup> This category of state-level workers per 100,000 includes individuals in the working-age population and information of 50 states and the District of Columbia.

<sup>9</sup> For some occupations, the formal educational requirements vary by state or are completed outside of institutions from which IPEDS collects data. NA means that graduate data are not available from IPEDS data.

<sup>10</sup> The ACS estimate for physician includes those providing patient care as well as those in residency training. The ACS data may also include physicians not providing patient care, such as those whose main activity is research and administration.

<sup>11</sup> The number of physician graduates includes those completing medical and osteopathic schools in the United States; it does not include graduates of foreign medical schools.

<sup>12</sup> Registered nurse (RN) data include RNs who have an associate's, bachelor's, or graduate degree. Data from the National Council of State Boards of Nursing show that about 160,000 individuals became newly licensed RNs after passing the National Council Licensure Examination for Registered Nurses (NCLEX-RN) in 2015.

<sup>13</sup> Nurse-Midwives and nurse practitioners are reported together because the 2011-2015 ACS file does not report these data separately.

<sup>14</sup> Licensed practical and licensed vocational nurses (LPN) data include LPNs who received at least one but less than two years of post-secondary education and an associate's degree.

Occupation	Total Workforce, 2011-2015 <sup>7</sup>	White/Non-Hispanic (%)	Female (%)	>55 years old (%)	Range of State-Level Workers per 100,000 population <sup>8</sup>	Total New Graduates, 2015 <sup>9</sup>
Medical and Clinical Laboratory Technologists and Technicians	393,230	62.0%	73.6%	24.4%	94 - 219	10,284
Diagnostic Related Technologists and Technicians	370,539	75.7%	71.2%	19.8%	69 - 217	22,651
Emergency Medical Technicians and Paramedics	225,887	78.9%	31.5%	7.4%	43 - 239	25,707
Health Practitioner Support Technologists and Technicians	674,868	64.5%	78.3%	12.0%	121 - 428	41,490
Medical Records and Health Information Technicians	167,149	65.3%	89.2%	27.1%	32 - 94	13,954
Medical Assistant	574,389	53.6%	92.2%	9.9%	81 - 327	84,874
Personal Care Aides	1,649,003	48.7%	84.6%	28.0%	277 - 1365	NA
Nursing, Psychiatric, and Home Health Aides	2,845,496	46.8%	87.2%	19.8%	622 - 1930	NA
<b>Part IV: Behavioral and Allied Health</b>						
Psychologists	217,449	83.5%	70.6%	42.4%	34 - 174	152,255
Counselors	376,763	64.1%	69.3%	30.9%	65 - 282	16,513
Social Workers	609,711	62.2%	81.5%	23.1%	138 - 423	51,259
Dietitians and Nutritionists	105,575	68.7%	89.4%	25.3%	27 - 68	5,837
Physical Therapists	235,238	77.8%	70.8%	14.0%	58 - 200	11,411
Physical Therapists Assistants and Aides	90,768	76.0%	71.5%	12.1%	17 - 75	NA
Occupational Therapists	108,412	83.8%	90.3%	14.8%	19 - 137	7,232
Respiratory Therapists	118,675	70.1%	64.6%	23.3%	20 - 87	7,367
Speech-Language Pathologists	156,512	86.1%	96.0%	22.3%	28 - 123	19,433
Massage Therapists	200,185	72.9%	82.0%	16.4%	29 - 190	NA

Data Source:

- HRSA analysis of the ACS PUMS, 2011-2015.
- BLS, Occupational Outlook Handbook, 2015.
- The National Center for Education Statistics IPEDS, 2014-2015.