



Behavioral Health Workforce Projections, 2016-2030: Psychiatrists (Adult), Child and Adolescent Psychiatrists

This factsheet presents national-level supply and demand projections for adult psychiatrists and child and adolescent psychiatrists from 2016 through 2030, using HRSA's Health Workforce Simulation Model (HWSM).¹ While the nuances of modeling workforce supply and demand differ for individual health occupations, the basic framework remains the same across provider types. For supply modeling, the major components include: common labor-market factors like unemployment; demographic and geographic characteristics of the existing workforce in a given occupation; new entrants to the workforce (e.g., newly trained psychiatrists); and workforce participation decisions (e.g., patterns in retirement and hours worked). For patient demand modeling, the HWSM assumes that demand equals supply in 2016,² and that the major components of patient demand include population demographics; health care use patterns; and demand for health care services (translated into requirements for full-time equivalents or FTEs).

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: <https://bhw.hrsa.gov/national-center-health-workforce-analysis>

In terms of limitations, this HWSM assumes that over the period studied, current national patterns of labor supply and service demand remain unchanged within each demographic group. Thus, changes in health care utilization patterns may affect projected demand in future years. Similarly, advances in medicine and technology and shifts in health care delivery models (e.g., team-based care, telemedicine) may also affect the efficiency of service delivery, and consequently, how provider supply is best assessed. These projections do not account for the geographic distribution of providers, which can impact access to care. HRSA will consider incorporating such factors into its future workforce projections as the evidence base evolves.

The following two scenarios are simulated: **Scenario One** assumed an estimated 5,500 FTE psychiatrists³ are required to remove all mental health professional shortage area (HPSA) designations, and **Scenario Two** adjusted current and projected demand based on estimates of unmet need from recent studies. HRSA recognizes the challenges with estimating demand and unmet need for behavioral health services. More information and a detailed explanation of how unmet need was estimated in our workforce model can be found in our technical documentation.⁴

¹ This model uses a micro-simulation approach where supply is projected based on the simulation of career choices of individual health workers. Demand for health care services is simulated for a representative sample of the current and future U.S. population based on each person's demographic and socioeconomic characteristics, health behavior, and health risk factors that affect health care utilization patterns. For more information on data and methods, please see: <https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/hwsm-technical-report-to-dea.pdf>

² The assumption that supply equals demand at baseline is a standard approach in workforce projection modelling. Please refer to: Ono T, Lafortune G, Schoenstein M. "Health workforce planning in OECD countries: a review of 26 projection models from 18 countries." *OECD Health Working Papers, No. 62*. France: OECD Publishing; 2013: 8-11.

³ U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis, National Projections of Supply and Demand for Selected Behavioral Health Practitioners: 2013-2025. <https://bhw.hrsa.gov/sites/default/files/bhw/health-workforce-analysis/research/projections/behavioral-health2013-2025.pdf>

⁴ U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. Technical Documentation for HRSA's Health Workforce Simulation Model. Rockville, MD: U.S. Department of Health and Human Services, 2018. Available from: <https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/hwsm-technical-report-to-dea.pdf>.

BACKGROUND

Psychiatrists are physicians who diagnose and treat mental illnesses and substance use disorders through a combination of modalities, including personal counseling (psychotherapy), psychoanalysis, hospitalization, and the use of medication. Psychiatrists must complete a 4-year residency program after medical school. Psychiatrists may also complete additional specialized fellowship training in sub-specialties such as child and adolescent psychiatry. All states and the District of Columbia require practicing psychiatrists to be licensed.⁵ Most psychiatrists also elect to become board certified, requiring case management experience as well as additional written and oral examinations beyond those required for state licensure.

FINDINGS FOR (ADULT) PSYCHIATRISTS

At the national level, approximately 39,180 psychiatrists were active in the U.S. workforce in 2016 (*Exhibit 1*). By 2030, the supply of psychiatrists is expected to decrease by approximately 27 percent given the number of psychiatrists entering, leaving, and changing work hours. Under Scenario One, the demand for psychiatrists is expected to increase by 6 percent to 46,470 FTEs by 2030. Population growth and aging accounted for the increase in demand, resulting in a shortage of 17,990 FTE psychiatrists. Under Scenario Two, which adjusts for the 20 percent of reported unmet need due to barriers in receiving care, demand is projected to increase by approximately 6 percent to 49,630 FTEs. Therefore, this scenario produces an estimated shortage of 21,150 FTE psychiatrists.

Exhibit 1. Estimated Supply of and Demand for (Adult) Psychiatrists in the United States, 2016-2030

	Scenario One (Assumes status quo)	Scenario Two (Assumes unmet need)
Supply		
Estimated supply, 2016	39,180	39,180
Estimated supply growth, 2016-2030:	-10,700 (-27%)	-10,700 (-27%)
<i>New entrants</i>	9,480	9,480
<i>Attrition^a</i>	-20,280	-20,280
<i>Changing work patterns^b</i>	100	100
Projected supply, 2030	28,480	28,480
Demand		
Estimated demand, 2016	44,000	46,990
Estimated demand growth, 2016-2030 ^c	2,470 (6%)	2,640 (6%)
Projected demand, 2030	46,470	49,630
Projected Supply (minus) demand^d	-17,990	-21,150

Notes: All numbers reflect full time equivalents. Numbers may not sum to totals due to rounding.

^a Includes retirements and mortality.

^b For example, changes from full-time to part-time, or vice versa.

^c Demand growth reflects changing demographics.

^d The demand for psychiatrists may lag behind supply due to projection models' use of current utilization patterns as the basis for future projections.

⁵ University of Michigan, Scopes of Practice for Behavioral Health Professionals. Accessed at: <http://www.behavioralhealthworkforce.org/practice-data-visualizations/> accessed July 27th, 2018.

FINDINGS FOR CHILD AND ADOLESCENT PSYCHIATRISTS

At the national level, approximately 6,210 child and adolescent psychiatrists were active in the U.S. workforce in 2016 (*Exhibit 2*). By 2030, the supply of child and adolescent psychiatrists is expected to increase by approximately 80 percent given the number of psychiatrists entering and leaving the profession, and/or changing work hours. The number of new child and adolescent psychiatrists entering the workforce is primarily responsible for this increase. Under Scenario One, the demand for child and adolescent psychiatrists is expected to remain relatively flat at 6,850 FTEs by 2030, reflecting Census Bureau projections showing little change in the population numbers for children under age 18 in the U.S. Under Scenario Two, which adjusts for 20 percent unmet need, demand is also projected to remain consistent at 7,450 FTEs.

Exhibit 2. Estimated Supply of and Demand for Child and Adolescent Psychiatrists in the United States, 2016-2030

	Scenario One (Assumes status quo)	Scenario Two (Assumes unmet need)
Supply		
Estimated supply, 2016	6,210	6,210
Estimated supply growth, 2016-2030:	4,950 (80%)	4,950 (80%)
<i>New entrants</i>	5,600	5,600
<i>Attrition^a</i>	-690	-690
<i>Changing work patterns^b</i>	40	40
Projected supply, 2030	11,160	11,160
Demand		
Estimated demand, 2016	6,890	7,450
Estimated demand growth, 2016-2030 ^c	-40 (-1%)	-10 (0%)
Projected demand, 2030	6,850	7,440
Projected Supply (minus) demand^d	4,310	3,720

Notes: All numbers reflect full time equivalents. Numbers may not sum to totals due to rounding.

^a Includes retirements and mortality.

^b For example, changes from full-time to part-time, or vice versa.

^c Demand growth reflects changing demographics.

^d The demand for child psychiatrists may lag behind supply due to projection models' use of current utilization patterns as the basis for future projections. This pattern of utilization may be due to lack of access to behavioral health care.