Behavioral Health Workforce Projections, 2016-2030:
Psychiatric Nurse Practitioners, Psychiatric Physician Assistants

This factsheet presents national-level supply and demand projections for psychiatric nurse practitioners (NPs) and physician assistants (PAs) 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 NPs); 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 supply and demand were in equilibrium in 2016, 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.[3]

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[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. 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

Psychiatric NPs earn advanced degrees in psychiatric-mental health nursing, and apply the nursing process to treat individuals or families with psychiatric disorders.[4] Psychiatric PAs perform psychiatric evaluations and assessments, order and interpret diagnostic studies, establish and manage treatment plans, and order referrals as needed.[5] Both professions most often work under the supervision of a psychiatrist or other physician, and may have the authority to prescribe medications. In some states, Psychiatric NPs can work independently from a physician. To become a licensed PA, a master's degree from an accredited educational institution is typically required. To become an NP, an individual must obtain a Master's or Doctoral degree in the respective Advanced Practice Nursing occupation and obtain licensure.[6]

FINDINGS

Between the years 2016 and 2030, the national supply of psychiatric NPs and PAs is projected to grow by 6,690 FTEs and 1,160 FTEs respectively (*Exhibit 1; Exhibit 2*). Collectively, 11,310 total new NPs and PAs will enter the workforce and 3,510 total NPs and PAs will exit. The net projected growth in supply will lead to a 67 percent overall increase in the national psychiatric NP and PA workforce, a total of 19,500 FTEs by 2030. Respectively, the estimated rates of growth for these NPs and PAs are 18 percent and 9 percent.

Exhibit 1. Estimated Supply of and Demand for Psychiatric Nurse Practitioners (NPs) in the United States, 2016-2030

	Scenario One (Assumes equilibrium)	Scenario Two (Assumes unmet need)
Supply		
Estimated supply, 2016	10,250	10,250
Estimated supply growth, 2016-2030:	6,690 (65%)	6,690 (65%)
New entrants, 2016 - 2030	9,840	9,840
Attrition, 2016 – 2030 [a]	-3,240	-3,240
Changing work patterns [b]	90	90
Projected supply, 2030	16,940	16,940
Demand		
Estimated demand, 2016	10,250	12,310
Estimated demand growth, 2016-2030 [c]	1,850 (18%)	2,190 (18%)
Projected demand, 2030	12,100	14,500
Projected Supply (minus) Demand, 2030 [d]	*4,840*	*2,440*

Note: All numbers reflect full-time equivalents (FTEs). Numbers may not sum to totals due to rounding.
[a] Includes retirements and mortality.
[b] For example, changes from full-time to part-time hours, or vice versa.
[c] Demand growth reflects changing demographics.
[d] The demand for psychiatric NPs 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.

[4] American Psychiatric Nurses Association. Psychiatric-Mental Health Nurses. 2018. Available from: https://www.apna.org/i4a/pages/index.cfm?pageID=3292.
[5] PhysicianAssistantEDU.org. Mental Health Physician Assistant. 2018. Available from: https://www.physicianassistantedu.org/psychiatry-mental-health/.
[6] U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. The U.S. Health Workforce Chartbook, Part I Available from: https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/chartbook1.pdf

Under Scenario One, demand for psychiatric NPs and PAs is estimated to increase by 1,850 FTEs and 130 FTEs, respectively. Combined demand for psychiatric NPs and PAs is estimated to grow from approximately 11,650 FTEs to 13,630 FTEs (17 percent) between 2016 and 2030 (*Exhibit 1; Exhibit 2*). Under Scenario Two, demand for psychiatric NPs and PAs is estimated to increase by 2,190 FTEs and 240 FTEs respectively. Combined demand for both professions is similarly expected to grow 17 percent, from about 13,990 FTEs in 2016 to 16,420 FTEs in 2030.

Exhibit 2. Estimated Supply of and Demand for Psychiatric Physician Assistants (PAs) in the United States, 2016-2030

	Scenario One (Assumes equilibrium)	**Scenario Two (Assumes unmet need)**
Supply		
Estimated supply, 2016	1,400	1,400
Estimated supply growth, 2016-2030:	1,160 (83%)	1,160 (83%)
New entrants, 2016 - 2030	*1,470*	*1,470*
Attrition, 2016 – 2030 [a]	*-270*	*-270*
Changing work patterns [b]	*-40*	*-40*
Projected supply, 2030	2,560	2,560
Demand		
Estimated demand, 2016	1,400	1,680
Estimated demand growth, 2016-2030 [c]	130 (9%)	240 (9%)
Projected demand, 2030	1,530	1,920
Projected Supply (minus) Demand, 2030 [d]	*1,030*	*640*

Note: All numbers reflect full-time equivalents (FTEs). Numbers may not sum to totals due to rounding.
[a] Includes retirements and mortality.
[b] For example, changes from full-time to part-time hours, or vice versa.
[c] Demand growth reflects changing demographics.
[d] The demand for psychiatric PAs 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.

These estimates suggest the U.S. will have a sufficient supply of psychiatric NPs and PAs to meet projected growth in demand for NP and PA services in 2030. While the supply of psychiatric NPs and PAs is expected to be adequate to meet demand under current patterns of labor supply and service utilization, these estimates do not capture changes in care delivery patterns or regional mal-distributions in psychiatric NP and PA supply that may be present both at baseline and in 2030.