



October 2022

BEHAVIORAL HEALTH

Available Workforce Information and Federal Actions to Help Recruit and Retain Providers

Accessible Version

GAO Highlights

Highlights of [GAO-23-105250](#), a report to congressional requesters

Why GAO Did This Study

Concerns about shortages of behavioral health providers are longstanding. In addition, the health and economic effects of the COVID-19 pandemic have intensified concerns about the increasing numbers of people affected by behavioral health conditions and in need of treatment.

GAO was asked to review what is known about the behavioral health workforce, and barriers to and incentives for recruiting and retaining behavioral health providers. This report describes (1) available information on the behavioral health workforce; (2) key barriers to and incentives for recruiting and retaining behavioral health providers; and (3) HHS agencies' actions to support recruiting and retaining behavioral health providers.

GAO reviewed federal agency workforce information, including 2020 data from SAMHSA's Mental Health and Substance Use Disorder Practitioner Data grant; HRSA's 2017-2030 Behavioral Health Workforce Projection, published in 2020; and the Bureau of Labor Statistics' (BLS) workforce data published in 2021. These agencies' data were the most recent data available at the time of GAO's review. GAO also reviewed the HHS Health Workforce Strategic Plan and implementation plan; relevant laws and regulations; and selected research on recruitment and retention barriers. GAO interviewed relevant agency officials and stakeholders from 13 research organizations and behavioral health associations familiar with workforce-related data and information.

GAO incorporated technical comments from HHS and BLS, as appropriate.

View [GAO-23-105250](#). For more information, contact Alyssa M. Hundrup at (202) 512-7114 or hundrupa@gao.gov.

October 2022

BEHAVIORAL HEALTH




Available Workforce Information and Federal Actions to Help Recruit and Retain Providers

What GAO Found

Behavioral health conditions—mental health and substance use disorders— affect millions of people in the United States. For example, in 2020, an estimated 53 million adults had a mental illness, according to the Substance Abuse and Mental Health Services Administration (SAMHSA). Access to treatment for behavioral health conditions relies, in part, on the supply of available providers. GAO found that agencies within the Department of Health and Human Services (HHS)—SAMHSA and the Health Resources and Services Administration (HRSA)—estimate and develop projections of the number of various types of providers in the behavioral health workforce. For example, a SAMHSA-supported study estimated there were about 1.2 million behavioral health providers in 2020. HRSA estimated shortages of psychiatrists in 2017 and has projected shortages of psychiatrists and addiction counselors for 2030, the last year of its projection period. HRSA estimates there will be a sufficient supply of other behavioral health occupations such as marriage and family therapists and school counselors by 2030.

Based on reviews of available research and stakeholder interviews, GAO identified three key categories of barriers that pose challenges to recruiting and retaining behavioral health providers: financial, educational, and workplace. GAO found that incentives such as loan repayment and scholarships for students seeking behavioral health professions help to address these barriers.

Examples of Barriers to Recruiting and Retaining Behavioral Health Providers

 Financial	 Educational	 Workplace
Reimbursement rates and compensation for behavioral health services are low, according to stakeholders from multiple research organizations and behavioral health associations.	Many programs designed to recruit diverse behavioral health providers only benefit individuals already studying in a behavioral health field and do not address the lack of a pipeline for underserved populations to enter the workforce, according to researchers we interviewed.	There is a shortage of licensed supervisors and funded internship positions in rural areas, according to a study on the psychologist workforce. Similarly, another study indicated that shortages of approved internships and qualified supervisors are barriers to recruiting school psychologists.

Source: GAO. | [GAO-23-105250](#)

GAO also found that HHS agencies have taken actions to support recruiting and retaining behavioral health providers. These actions include administering various workforce development programs to help recruit and retain qualified providers to work in underserved and mental health shortage areas. For example, HRSA's National Health Service Corps program provides loan repayment and scholarships to various types of providers, such as psychiatrists and psychologists. In return, the providers agree to practice in underserved areas for at least 2 years. According to HRSA, over 80 percent of behavioral health providers that graduated from these programs from 2012 through 2020 remained practicing in underserved areas as of 2021.

Contents

GAO Highlights	ii
Why GAO Did This Study	ii
What GAO Found	2
Letter	1
Background	6
Available Information on the Behavioral Health Workforce	7
Key Barriers to and Incentives for Recruiting and Retaining Behavioral Health Providers	15
Actions HHS Agencies Have Taken to Support Recruiting and Retaining Behavioral Health Providers	19
Agency Comments	21
Appendix I: Objectives, Scope, and Methodology	23
Appendix II: Workforce Data Provided by the Bureau of Labor Statistics	27
Appendix III: Select Department of Health and Human Services Agencies' Programs for Recruiting and Retaining Health Care Providers	30
Appendix IV: GAO Contact and Staff Acknowledgments	35
GAO Contact	35
Staff Acknowledgments	35
Bibliography	36
Related GAO Products	39
Tables	
Table 1: Number of Select Behavioral Health Providers Nationwide, by Occupation, as Estimated by the Substance Abuse and Mental Health Services Administration (SAMHSA), 2020	8
Table 2: Projections of the Supply and Demand for Behavioral Health Providers for 2017 and 2030, Health Resources and Services Administration, 2020	12
Table 3: Federal Agencies, Behavioral Health Associations, and Researchers Interviewed about Behavioral Health Workforce Issues	25

Table 4: Employment Projections for Select Occupations that May Provide Behavioral Health Services, Bureau of Labor Statistics (2020-2030 Projection)	27
Table 5: Occupational Employment Estimates for Select Occupations that May Provide Behavioral Health Services, Bureau of Labor Statistics (May 2021)	29
Table 6: Fellowship and Graduate Psychology Education Programs, Department of Health and Human Services (HHS)30	
Table 7: Student Loan Repayment Programs, Department of Health and Human Services (HHS)	32
Table 8: Scholarship Programs, Department of Health and Human Services (HHS)	32
Table 9: Training Programs, Department of Health and Human Services (HHS)	34

Figure

Figure 1: Examples of Barriers to Recruiting and Retaining Behavioral Health Providers	17
--	----

Abbreviations

BLS	Bureau of Labor Statistics
HHS	Department of Health and Human Services
HRSA	Health Resources Services Administration
OEWS	Occupational Employment and Wage Statistics
SAMHSA	Substance Abuse and Mental Health Services Administration

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



October 27, 2022

The Honorable Frederica Wilson
Chair
Subcommittee on Higher Education and Workforce Investment
Committee on Education and Labor

House of Representatives
The Honorable Anna G. Eshoo
Chair

Subcommittee on Health
Committee on Energy and Commerce
House of Representatives

The Honorable David Trone
House of Representatives

Behavioral health conditions, which include mental health and substance use disorders, affect millions of people in the United States.¹ In 2020, an estimated 53 million adults (21 percent of individuals over age 18) had a mental illness, and an estimated 40 million people aged 12 or older (14.5 percent) had a substance use disorder.² Additionally, according to the most recent provisional data from the Centers for Disease Control and Prevention, a predicted record high of 108,642 drug overdose deaths

¹We define behavioral health conditions as all mental, emotional, and substance use disorders that are included in the Diagnostic and Statistical Manual of Mental Disorders. Examples of mental health conditions include anxiety disorders; mood disorders, such as depression; post-traumatic stress disorder; and schizophrenia. Examples of substance use disorders include alcohol use disorder and opioid use disorder.

²See Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health* (Rockville, Md.: October 2021). SAMHSA classified adults aged 18 or older as having any mental illness if they had any mental, behavioral, or emotional disorder in the past year of sufficient duration to meet criteria in the Diagnostic and Statistical Manual of Mental Disorders (excluding developmental disorders and substance use disorders). SAMHSA classified individuals aged 12 or older as having a substance use disorder to include alcohol use and illicit drug use disorders. The survey excluded people with no fixed address, military personnel on active duty, and residents of institutional facilities, such as nursing homes and prisons.

occurred in the United States during the 12-month period ending in February 2022.³

Moreover, the effects of the COVID-19 pandemic and related economic crisis—including increased social isolation, stress, and unemployment—have intensified concerns about the number of people in the United States affected by behavioral health conditions. For example, disparities in access to behavioral health care could contribute to a higher risk of behavioral health effects for people from certain racial and ethnic groups.⁴ As such, an adequate, well-trained, and diverse behavioral health care workforce is essential for providing access to quality behavioral health care services.

There have been longstanding concerns about the availability of qualified behavioral health providers in the United States. For example, we reported in 2015 that one potential barrier to accessing treatment is shortages of qualified behavioral health providers, particularly in rural areas.⁵ Furthermore, such concerns have become more pronounced as the demand for treatment services has grown.⁶ As of June 2022, the Health Resources and Services Administration (HRSA) designated more than 6,300 mental health provider shortage areas, with more than one-third of Americans (152 million people) living in these shortage areas.⁷ In

³The provisional data represents the Centers for Disease Control and Prevention's National Center for Health Statistics predicted number of drug overdose deaths. These provisional counts are adjusted to account for reporting delays. Provisional data are underreported due to incomplete data.

⁴See GAO, *Behavioral Health and COVID-19: Higher-Risk Populations and Related Federal Relief Funding*, [GAO-22-104437](#) (Washington, D.C.: Dec. 10, 2021). For this report, "people from certain racial and ethnic groups," refers to people of races and ethnicities other than non-Hispanic White, including people who identify as multiracial. The term behavioral health effects refers to new or exacerbated behavioral health symptoms and conditions associated with the pandemic, such as anxiety, depression, and substance use.

⁵See GAO, *Behavioral Health: Options for Low-Income Adults to Receive Treatment in Selected States*, [GAO-15-449](#) (Washington, D.C.: June 19, 2015).

⁶See GAO, *Mental Health Care: Access Challenges for Covered Consumers and Relevant Federal Efforts*, [GAO-22-104597](#) (Washington, D.C.: Mar. 29, 2022).

⁷Health professional shortage areas are defined by statute. See 42 U.S.C. §254e. The Health Professional Shortage Areas designation system, established in 1978 by the Department of Health and Human Services (HHS), identifies areas, populations, and facilities that have a shortage in primary, dental, or mental health care providers. HRSA annually updates the Area Health Resource Files, which include, among other things, information on mental health shortage areas.

these areas, HRSA estimated that the number of mental health providers available were adequate to meet about 28 percent of the estimated need.

The federal government—largely through the Department of Health and Human Services (HHS)—funds education and training programs to help expand the supply and distribution of health care professionals. Within HHS, the Substance Abuse and Mental Health Services Administration (SAMHSA) and HRSA collect data on the behavioral health workforce, including information to develop estimates and projections of various providers. Additionally, SAMHSA and HRSA administer various recruitment and retention programs and grants aimed at increasing the number of individuals in behavioral health professions.

You asked us to describe what is known about the behavioral health workforce, as well as barriers to and incentives for recruiting and retaining behavioral health providers.

In this report, we describe

1. available information on the behavioral health workforce, including information on workforce size and composition;
2. key barriers to and incentives for recruiting and retaining behavioral health providers; and
3. HHS agencies' actions to support recruiting and retaining behavioral health providers.

To describe the behavioral health workforce, including its size and composition, we reviewed the most recent publicly available federal sources of workforce estimates and projections. These were 2020 data from SAMHSA's Mental Health and Substance Use Disorder Practitioner Data grant and HRSA's 2017-2030 Behavioral Health Workforce Projections, published in 2020. We also reviewed workforce data from the Bureau of Labor Statistics (BLS), within the Department of Labor, which includes information on certain occupations that may be considered part

of the behavioral health workforce.⁸ We reviewed reports and other agency documents, such as technical documentation supporting workforce projections, grants, and cooperative agreements with organizations supporting HHS's workforce efforts.

We interviewed officials from HHS agencies with workforce-related data and responsibilities, including SAMHSA, HRSA, the Office of the Assistant Secretary for Planning and Evaluation, and the Centers for Medicare & Medicaid Services. We also interviewed officials from BLS to obtain information on the methods the agency uses to collect and examine data on occupations that may be considered part of the behavioral health workforce. Additionally, we interviewed 13 stakeholders representing a range of roles and perspectives with respect to workforce-related data and information used to describe the behavioral health workforce. These stakeholders included officials from seven behavioral health associations, four university-affiliated research groups, and two non-profit research organizations. We also obtained information from officials with the HHS Office of the Assistant Secretary for Health, and interviewed relevant SAMHSA officials regarding the HHS Behavioral Health Coordinating Council.⁹

To assess the reliability of the publicly available data we used, we reviewed published datasets, reports, and technical documentation that SAMHSA, HRSA, and BLS used to develop workforce estimates and projections. We also interviewed officials familiar with producing these workforce estimates and projections. We determined that the data were sufficiently reliable for describing information on the behavioral health workforce.

To identify and summarize key barriers to and incentives aimed at addressing the recruitment and retention of behavioral health providers,

⁸For this report, we generally refer to all licensed and non-licensed paraprofessionals involved in the delivery of behavioral health services as behavioral health providers. Additionally, other federal agencies—such as the Census Bureau, within the Department of Commerce, or the National Center for Education Statistics, within the Department of Education—may develop information that can support analyses of the behavioral health workforce. There may also be other HHS programs or sources of data—such as claims data from the Centers for Medicare & Medicaid Services or SAMHSA's National Survey on Drug Use and Health—that collect information that could support analyzing the supply and demand for behavioral health providers. However, in this report, we primarily focus on federal agencies with published projections or estimates of certain behavioral health providers that may comprise the behavioral health workforce.

⁹The council includes officials from multiple HHS agencies, and is intended to facilitate collaboration among the agencies in addressing a variety of behavioral health issues.

we conducted a literature review of relevant peer-reviewed research published from January 2011 through October 2021. We selected 27 articles that met our criteria for inclusion in the literature review. Additionally, we interviewed the same 13 stakeholders about key barriers to and incentives for recruitment and retention of providers.

To describe HHS agencies' actions aimed at recruiting and retaining individuals into the behavioral health workforce, we reviewed the most recently available and relevant documentation on programs at SAMHSA and HRSA.¹⁰ We interviewed relevant agency officials and researchers, as well as representatives from behavioral health associations, as outlined above.

For all objectives, we reviewed HHS's Health Workforce Strategic Plan 2021 and its subsequent implementation plan published in May 2022.¹¹ (See app. I for additional information on our scope and methodology.)

We conducted this performance audit from May 2021 to October 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹⁰In addition to HHS, other federal agencies—such as the departments of Defense and Veterans Affairs—also support health care workforce development programs. States have also played a role in health care workforce development. Several states have health care workforce initiatives intended to fill certain gaps in the health care workforce. There are also other federal agencies—such as the Department of Education—that may offer loan repayment programs. For this report, we focused on HHS education, training, and payment programs that supported education and training of behavioral health providers by directly providing or funding one or more of the following services—instruction or formal training opportunities; on-the-job clinical training for postgraduate health professionals; financial assistance for health professional students or professionals; or patient care-related continuing education for direct care health professionals if such training was the main program service provided.

¹¹See Department of Health and Human Services, *Health Workforce Strategic Plan* (Washington, D.C.: November 2021); and Department of Health and Human Services, *Report to Congress: Implementation of the Health Workforce Strategic Plan* (Washington, D.C.: May 2022).

Background

The behavioral health workforce includes a broad spectrum of professional and paraprofessional occupations that have varying education, licensure, and training requirements. For example, the workforce includes licensed professional occupations, such as psychiatrists, psychologists, marriage and family therapists, and social workers. It also includes non-licensed paraprofessionals, such as peer support specialists and community health workers.¹² Some occupations, such as counselors, may be licensed or non-licensed.

Providers deliver behavioral health services in a number of different settings, including inpatient hospitals, outpatient clinics, private offices, and schools. Treatment of mental health illness or mental disorders includes an array of options ranging from less to more intensive and may include prevention services, screening and assessment, outpatient treatment, inpatient treatment, and emergency services. Prescription drugs may also be included as part of treatment for mental health conditions.

Various federal agencies regularly conduct workforce-related activities. This includes making information available about the health care workforce, including those involved in the delivery of behavioral health services. For example:

- **SAMHSA** leads public health efforts to advance the behavioral health of the nation and its mission is to reduce the impact of substance abuse and mental illness on America's communities. The agency administers grants to states and local communities to support mental health and substance abuse treatment and prevention services, as well as to universities and professional organizations to support provider education and training. SAMHSA also collects surveillance data and provides information on substance use and mental health issues, including workforce issues.¹³
- **HRSA** works to improve health outcomes and achieve health equity through access to quality services; a skilled health workforce; and

¹²Other types of non-licensed occupations include certified and non-certified prevention professionals.

¹³See Substance Abuse and Mental Health Services Administration, *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health*, HHS Publication No. PEP21-07-01-003, NSDUH Series H-56 (Rockville, Md.: 2021). This annual survey covers the civilian, non-institutionalized population aged 12 or older in the United States.

innovative, high-value programs, according to its mission statement. Among others, one of its goals is to foster a health workforce and health infrastructure able to address current and emerging needs. HRSA also provides funding to support behavioral health workforce training.

- **BLS** publishes national workforce data and employment projections, which include occupations considered as part of the health care workforce, including the behavioral health workforce, though it does not provide specific reports on the behavioral health workforce. BLS uses the data to develop information on current and projected employment needs and job opportunities, analyze the occupational composition of different industries and areas, and provide quantitative information for career decision making. See appendix II for more information about BLS projections of certain behavioral health providers, and on providers that provide general health care services and may be involved in the delivery of behavioral health services as well.

In November 2021, HHS released its Health Workforce Strategic Plan in response to a CARES Act requirement that the agency develop a comprehensive and coordinated plan for workforce development.¹⁴ The strategic plan provides a framework for HHS agencies to address key barriers to strengthening the health care workforce, such as by expanding incentives for behavioral health workforce recruitment and retention. The strategic plan includes goals for HHS agencies to

- expand the health care workforce to meet evolving community needs;
- improve the distribution of providers in the health care workforce to reduce shortages;
- enhance health care through professional development, collaboration, and evidence-informed practice; and
- develop and apply data and evidence to strengthen the health care workforce.

Available Information on the Behavioral Health Workforce

We found two federal agencies—SAMHSA and HRSA—are the most directly involved in collecting information to estimate or develop

¹⁴Pub. L. No. 116-136, § 3402(b), 134 Stat. 281, 387 (2020).

projections of the number of providers in various occupations comprising the behavioral health workforce. SAMHSA and HRSA are also working to improve available information on the workforce, such as through the establishment of a Behavioral Health Coordinating Council in 2021.

SAMHSA Grant Program Estimated the Number of Certain Behavioral Health Providers in 2020

SAMHSA awarded the Mental Health and Substance Use Disorder Practitioner Data grant to George Washington University in 2019 with the goal of developing estimates of the number of various providers nationwide that offer services specific to preventing and treating mental health and substance use disorders.¹⁵ Using multiple data sources, such as retail prescription data and state licensure information, George Washington University researchers estimated that in 2020 there were nearly 1.2 million providers in the behavioral health workforce.¹⁶ This estimate includes more than 600,000 behavioral health specialists—providers typically involved in the delivery of behavioral health services—and more than 500,000 providers—including primary care physicians—who may not be considered behavioral health providers, but prescribed 11 or more behavioral health medications during a 1-year period. (See table 1.)

Table 1: Number of Select Behavioral Health Providers Nationwide, by Occupation, as Estimated by the Substance Abuse and Mental Health Services Administration (SAMHSA), 2020

Provider type	Estimate (2020)
<i>Behavioral health specialists (total)</i>	612,447
<i>Behavioral health specialists (total):</i> Addiction medicine	3,847
<i>Behavioral health specialists (total):</i> Addiction psychiatry	918
<i>Behavioral health specialists (total):</i> Child and adolescent psychiatry	7,832
<i>Behavioral health specialists (total):</i> Licensed clinical social workers	221,791

¹⁵SAMHSA awarded its Mental Health and Substance Use Disorder Practitioner Data grant to George Washington University in September 2019 as a 3-year grant that directed the awardee to obtain data to identify and provide estimates for various behavioral health professions.

¹⁶According to documentation from George Washington University, estimates include providers identified as having prescribed more than 11 behavioral health medication prescriptions in a calendar year. Researchers purchased retail pharmacy data spanning the period of January 2017 through December 2020 to identify providers meeting this threshold, and planned to update the estimates with 2021 prescription data once it is available.

Letter

Provider type	Estimate (2020)
<i>Behavioral health specialists (total): Licensed marriage and family therapists</i>	64,592
<i>Behavioral health specialists (total): Licensed professional counselors</i>	172,446
<i>Behavioral health specialists (total): Psychiatry</i>	39,071
<i>Behavioral health specialists (total): Psychologists</i>	102,004
<i>Other providers prescribing behavioral health medicine (total)</i>	574,745
<i>Other providers prescribing behavioral health medicine (total): Advanced practice providers</i>	193,356
<i>Other providers prescribing behavioral health medicine (total): Other physicians</i>	173,556
<i>Other providers prescribing behavioral health medicine (total): Primary care physicians</i>	207,833
Total	1,187,192

Source: George Washington University Fitzhugh Mullan Institute for Health Workforce Equity, Behavioral Health Workforce Tracker. | GAO-23-105250

Note: Data in the table includes information developed by researchers at George Washington University as part of SAMHSA's Mental Health and Substance Use Disorder Practitioner Data grant. Researchers did not include standard errors when determining estimates. Data are estimates, as reported in March 2021, of the number of providers in 2020 identified by researchers using retail prescription and state licensure data. Table includes providers who may be considered behavioral health specialists, as well as other providers that prescribed 11 or more prescriptions to prevent or treat mental health and substance use disorders.

Additionally, under the SAMHSA grant, researchers estimated the number of practicing non-licensed paraprofessionals, such as peer specialists and community health workers.¹⁷ Specifically, the researchers estimated that in 2020, nationwide, there were approximately

- 7,034 peer support specialists, and
- 17,455 community health workers working in the behavioral health field.

¹⁷SAMHSA defines the behavioral health workforce broadly to include highly trained providers, as well as mental health counselors and paraprofessionals, for the purpose of training providers to deliver treatment for substance use disorders and in programs for training culturally competent professionals across a range of settings, such as emergency rooms, inpatient treatment programs, prevention programs, and schools.

These estimates may not have included all practicing paraprofessionals, as they were limited to those who had registered with the Centers for Medicare & Medicaid Services to bill for behavioral health services.¹⁸

Researchers published the 2020 estimates online through a Behavioral Health Workforce Tracker, which includes information on the geographic distribution of providers and whether they prescribed medication in 2020.¹⁹ Through the tracker, users can see estimates of certain providers at the county and state level, compare data across geographic areas, and examine whether providers who prescribed medications also treated Medicaid beneficiaries, among other things. For example, according to data available in the tracker, approximately 50 percent of counties in the United States did not have an active psychiatrist or addiction medicine specialist in 2020. Paraprofessional estimates, however, are not included in the online tracker. According to SAMHSA officials, the data are not sufficiently complete to include the geographic distribution of paraprofessionals—a large and growing part of the overall behavioral health workforce, according to stakeholders—within the tracker.

The estimates developed under SAMHSA's Mental Health and Substance Use Disorder Data grant do not include the racial or ethnic diversity of the providers included in the workforce estimates. According to the researchers, these data were not consistently available in the information they collected.

¹⁸The Centers for Medicare & Medicaid Services, which administers the Medicare program and jointly administers the Medicaid program, assigns a National Provider Identifier to providers through its National Plan and Provider Enumeration System. Through the National Provider Identifier application, the agency collects information about providers including such things as their specialization, gender, and location where they practice. Health care providers who transmit any health information in electronic form for financial or administrative activities are required to have a National Provider Identifier. When applying for a National Provider Identifier number, providers select a Health Care Provider Taxonomy code that best describes their specialization.

Medicare is the federal health insurance program for persons aged 65 or over, certain individuals with disabilities, and individuals with end-stage renal disease. Medicaid is a joint federal-state program that finances health care coverage for certain low-income and medically needy individuals.

¹⁹In April 2022, George Washington University researchers developed the Behavioral Health Workforce Tracker to provide county- and state-level data on the geographic distribution of the behavioral health workforce. Information also includes whether providers accept Medicaid payment as reimbursement for services. According to SAMHSA officials, available data is not adequate to include state- and county-level information on paraprofessionals.

See the website for estimates and guidance, *Behavioral Health Workforce Tracker*, accessed August 19, 2022, <https://maps.healthlandscape.org/gw/>.

SAMHSA officials said that George Washington University researchers would continue program activities—such as research, data analyses, and refining estimates of the workforce—under the grant through September 2023, but the agency will not renew this grant program. Instead, according to SAMHSA officials, the agency will transfer future program funding to support its collaboration with HRSA on a behavioral health workforce research center, as discussed below. George Washington University researchers said that activities through the end of the grant include updating the Behavioral Health Workforce Tracker with data for 2021, as well as estimating changes between 2020 and 2021 in the number of providers that prescribed medications. Additionally, activities will include obtaining data that provides information on the number of behavioral health specialists—counselors, therapists, and psychologists—in 2022.

HRSA Develops Projections of the Supply and Demand for Some Behavioral Health Providers

HRSA develops and publishes national-level projections of the supply and demand for some occupations in the behavioral health workforce. HRSA uses data from various sources—such as professional associations, national surveys, and state licensure files—to develop its projections. In 2020, HRSA published its 2017-2030 Behavioral Health Workforce Projection report, which includes supply and demand projections for the years 2017 and 2030 for 10 occupations, including those that are typically considered direct behavioral health providers, such as addiction counselors and psychiatrists, or occupations where providers may conduct behavioral health services, such as social workers.²⁰ (See table 2.)

Additionally, in 2021, HRSA published the agency's behavioral health workforce projection data online, through the Workforce Projections Dashboard. The dashboard provides national estimates for the 10 occupations for each year of the projection period, 2017 through 2030, and for each scenario included in HRSA's Health Workforce Simulation Model. For example, one scenario estimates the supply of each type of

²⁰HRSA's 2017-2030 behavioral workforce projections include estimates to account for varying scenarios conducted through its Health Workforce Simulation Model—such as a basic status quo scenario, which examines whether the future behavioral health workforce will be sufficient to provide a level of care at least as good as the level of care identified for 2017, or estimates of the supply of providers if 10 percent fewer new graduates entered the workforce—that may affect individual behavioral health providers.

provider, by year, if 10 percent fewer new graduates in those fields enter the workforce. According to HRSA officials, the agency plans to use the dashboard to provide projections, instead of publishing reports that only provide data for the first and last year of the projection period.

Table 2: Projections of the Supply and Demand for Behavioral Health Providers for 2017 and 2030, Health Resources and Services Administration, 2020

Occupation	Supply (2017 projections)	Demand (2017 projections)	Supply (2030 projections)	Demand (2030 projections)	Adequacy of supply projection (percentage)
Adult psychiatry	33,650	38,410	27,020	39,550	68
Addiction counselors	91,340	91,340	93,880	105,410	89
Child psychiatry	8,090	9,240	9,830	9,190	107
Marriage and family therapists	53,080	53,080	72,650	57,970	125
Mental health counselors	140,760	140,760	164,320	158,850	103
Psychiatric nurse practitioners	10,450	10,450	16,900	12,050	140
Psychiatric physician assistants	1,550	1,550	2,890	1,670	173
Psychologists	91,440	91,440	103,440	95,600	108
School counselors	116,080	116,080	218,130	119,140	183
Social workers	239,410	239,410	513,370	268,750	191

Source: Department of Health and Human Services, Health Resources and Services Administration's 2020 projection report, "2017-2030 Behavioral Health Workforce Projections." | GAO-23-105250

Note: The Health Resources and Services Administration (HRSA) did not include standard errors for data in projections. The information presented in the table reflects national-level supply and demand projections for select behavioral occupations for 2017 and 2030, using HRSA's Health Workforce Simulation Model. The table also presents information to describe the adequacy between the projected future supply and projected future demand of demand of full-time equivalents in the selected occupations. A percent adequacy greater than 100 does not necessarily mean there will be an oversupply of a health profession and does not account for potential maldistribution at smaller geographic areas. The data in the table reflects "status quo" modeling to determine whether the behavioral health workforce will be sufficient to provide a level of care at least as good as 2017 levels and it does not address inadequacies related to current care levels. For additional data and technical documentation, see *Behavioral Health Workforce Projections*, accessed August 19, 2022, <https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand/behavioral-health>.

HRSA's projections are intended to help identify whether there may be a shortage of, or if there is sufficient supply to meet the demand for, one or

more of the 10 specific provider types.²¹ For example, HRSA projects shortages in the numbers of psychiatrists serving adults in 2017, and that would continue for 2030 if there are no changes in behavioral health care utilization.²² In contrast, HRSA projects a sufficient supply to meet demand for several other occupations, such as marriage and family therapists and school counselors, by 2030.

HRSA's projections are limited to 10 occupational types that include the largest number of individuals who may provide behavioral health services, according to HRSA. The occupational types included in the projections are specific to highly trained (e.g., graduate degree) professionals, and the projections do not include non-licensed paraprofessionals, such as peer specialists and community health workers. According to HRSA officials, there is not a single source or governing body that collects data on these types of paraprofessionals. Furthermore, according to agency documentation, data that may be available is insufficient to project changes in supply and demand for these occupations.

HRSA's projections do not include information on the racial or ethnic makeup of the providers. According to HRSA's technical documentation and interviews with HRSA officials, demographic characteristics—such as age, race, and ethnicity—are not included in all of the different underlying data sources, such as data from professional associations and other governing boards that support the agency's modeling.

HRSA's projections also do not include the potential impact of the COVID-19 pandemic on the behavioral health workforce. HRSA officials explained that they have not yet taken steps to modify their projections, because limited data are available at present to begin analyzing the impact of short- or long-term effects of COVID-19. For example, analysis could include assessing the impact of burnout on health care workers or the effect on health care utilization patterns of the 16 to 18 months of deferred treatments during 2020 and 2021.

²¹See 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.: 2019). Also see HRSA's website for additional projections, as well as guidance on the use of the workforce dashboard, *Workforce Projections*, accessed August 19, 2022, <https://data.hrsa.gov/topics/health-workforce/workforce-projections>.

²²HRSA's projection reports provide estimates that assume that over the period studied, 2017-2030, existing national patterns of labor supply and service demand remain unchanged.

SAMHSA and HRSA Have Efforts to Improve Information across the Behavioral Health Workforce

SAMHSA and HRSA, along with HHS, have recognized the need to improve what is known about the behavioral health workforce and have taken initial steps to improve this information. In particular, HHS established the Behavioral Health Coordinating Council in May 2021.²³ The council has five subcommittees focused on specific topics, including an integration subcommittee, which consists of subject matter experts from HHS agencies.²⁴ According to HHS officials, this subcommittee intends to focus on activities to support a diverse health workforce and improve equitable access to integrated physical and behavioral health services. At its July 2022 meeting, the council created a behavioral health workforce workgroup that, according to HHS officials, will meet as needed to develop and provide expertise on workforce issues, and report to the integration subcommittee. HHS officials said that, as of September 2022, the workgroup had not yet developed goals and priorities for the work it plans to undertake.

Additionally, SAMHSA and HRSA are collaborating to support a behavioral health workforce research center.²⁵ Specifically, since 2015, HRSA has collaborated with SAMHSA to oversee and fund a behavioral health workforce research center. HRSA's Health Workforce Research Center Cooperative Agreement Program funds up to nine research centers that focus on various issues or segments of the health

²³The Behavioral Health Coordinating Council has a formal charter signed by the Secretary of HHS. HHS previously supported a council with the same name, established by the Secretary of HHS in 2010, but HHS officials said the 2021 council is not related to the previous one. The previous council coordinated across HHS agencies mainly on substance use issues.

²⁴The four other subcommittees of the Behavioral Health Coordinating Council include performance measures, data, and evaluation; children and youth behavioral health; overdose prevention; and suicide prevention and crisis care.

²⁵As a joint initiative between HRSA and SAMHSA, the behavioral health workforce research center receives guidance and direction from both agencies. For example, while HRSA administers the program, SAMHSA participates in the annual project selection process and in routine project meetings to help ensure the research direction and projects align with agency priorities.

workforce.²⁶ For example, in 2018, researchers from the University of Michigan, the cooperative agreement recipient, published research that examined standardizing the collection of behavioral health workforce data. They reported that the adoption of standardized data would require certain regulatory changes by states.²⁷

In January 2022, HRSA published a funding announcement to support continuing research for up to 5 years through the health workforce research center program, including for a behavioral health workforce research center. SAMHSA would provide the program funding. In August 2022, HRSA awarded this funding to the University of North Carolina at Chapel Hill.²⁸ The cooperative agreement requires that the recipient for the behavioral health workforce center develop research projects focused on topics such as investigating the composition of the behavioral health workforce; the workforce's data, needs, sufficiency, and distribution; and the integration of the behavioral and physical health workforces.²⁹

Key Barriers to and Incentives for Recruiting and Retaining Behavioral Health Providers

Based on our review of available research and interviews with 13 stakeholders representing research institutions and behavioral health associations, we found that several key barriers pose challenges to recruiting and retaining behavioral health providers.

²⁶In 2015, the University of Michigan's School of Public Health received \$2.7 million, through a 3-year cooperative agreement, to establish a center for behavioral health workforce research. The university received additional funding in 2018 to continue operating as the Behavioral Health Workforce Research Center for 4 years.

²⁷See Angela J. Beck et al., "Improving Data for Behavioral Health Workforce Planning: Development of a Minimum Data Set," *American Journal of Preventive Medicine*, vol. 54, no. 6 (2018).

²⁸The University of North Carolina at Chapel Hill will receive \$4.5 million in funding from HRSA over the course of the 5-year cooperative agreement. Among its other proposed centers, HRSA also anticipates awarding up to \$450,000 annually for two emerging health workforce centers, which will focus on emerging workforce topics, such as the impact of the COVID-19 pandemic on the health care workforce.

²⁹Other research project focus areas for the behavioral health workforce research center are to evaluate disparities in behavioral health occupations related to reducing disparities in mental illness or substance use disorders across populations, and assessing service delivery methods, including, but not limited to, various models of care and reimbursement issues.

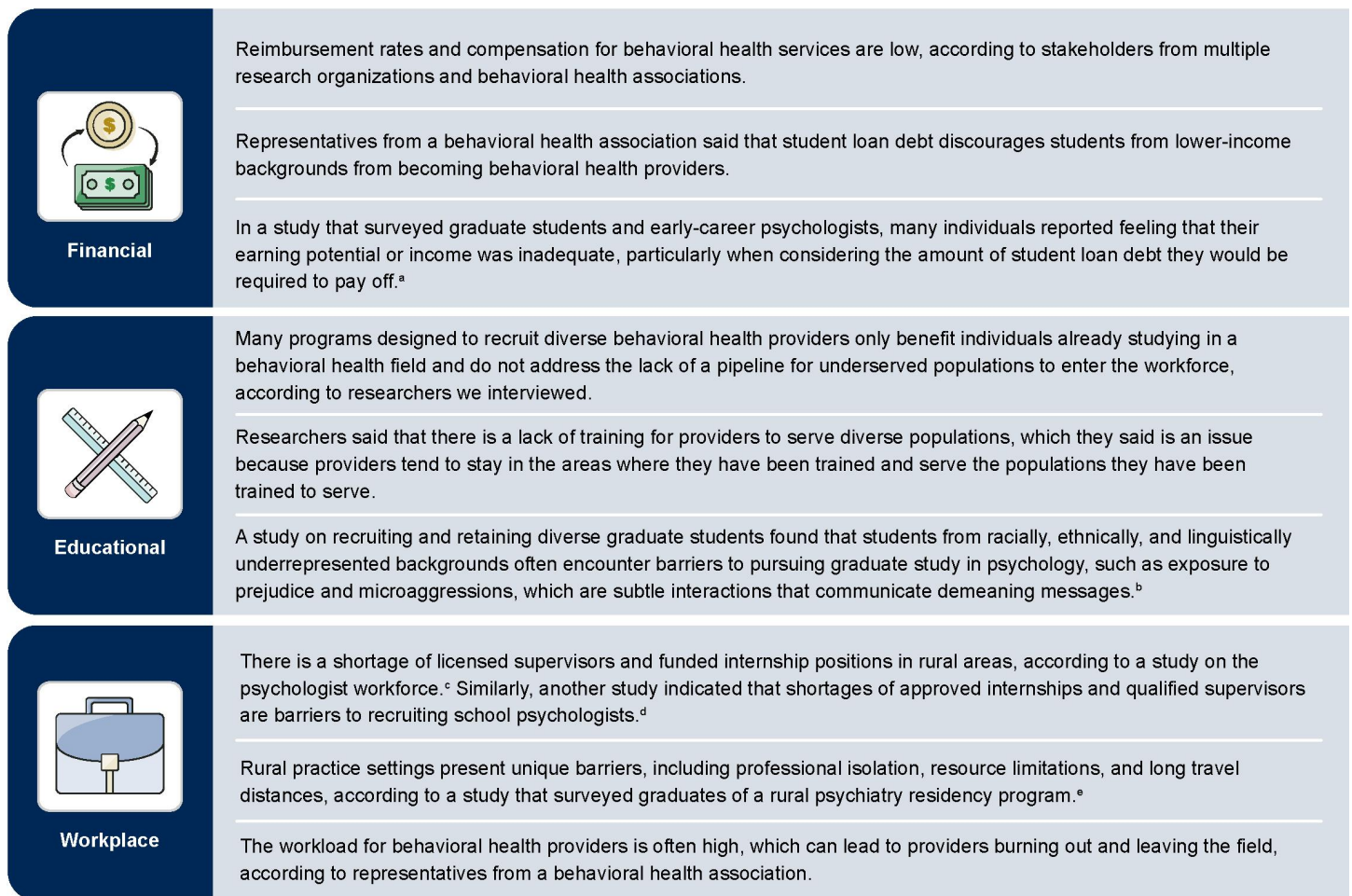
According to the literature that we reviewed, in some instances barriers can have a broad effect across the workforce, while in other instances barriers exist within specific occupations or demographics. For example, one study identified barriers to recruiting and retaining mental health providers specific to rural areas, including limited funding, professional isolation, and difficulty obtaining the supervision required for licensure.³⁰

We identified three key categories of barriers: financial, educational, and workplace.³¹ (See fig. 1.)

³⁰See Shinobu Watanabe-Galloway et al., "Recruitment and Retention of Mental Health Care Providers in Rural Nebraska: Perceptions of Providers and Administrators," *Rural and Remote Health*, vol. 15, no. 3392 (2015): 1-13.

³¹SAMHSA identified these same barriers in an agency-funded report in 2007. SAMHSA commissioned the Annapolis Coalition for the Behavioral Health Workforce, a not-for-profit organization focused on improving workforce development in the behavioral health field, to develop a national action plan on workforce development. The planning process was funded by the SAMHSA Office of the Administrator and all three centers within the agency: the Center for Mental Health Services, the Center for Substance Abuse Treatment, and the Center for Substance Abuse Prevention. See The Annapolis Coalition on the Behavioral Health Workforce, *An Action Plan for Behavioral Health Workforce Development* (Cincinnati, Ohio: 2007).

Figure 1: Examples of Barriers to Recruiting and Retaining Behavioral Health Providers



Source: GAO analysis of stakeholder input and selected research. | GAO-23-105250

Note: We conducted a structured literature search of multiple databases for articles published between 2011 and 2021 to identify key barriers that can affect the recruitment or retention of behavioral health providers. We interviewed stakeholders with knowledge of the behavioral health workforce from 13 organizations representing behavioral health associations, non-profit organizations, and research institutions. Some of the barriers identified may be unique to certain occupations, demographics, or geographic locations, while others may be experienced by individuals and providers more broadly.

^aJennifer M. Doran et al., “Graduate Debt in Psychology: A Qualitative Analysis,” *Training and Education in Professional Psychology*, vol. 10, no. 4 (2016): 179–87.

^bSally L. Grapin, Erica T. Lee, and Dounia Jaafar, “A Multilevel Framework for Recruiting and Supporting Graduate Students from Culturally Diverse Backgrounds in School Psychology Programs,” *School Psychology International*, vol. 36, no. 4 (2015): 339–57.

^cMarisa Elena Domino et al., “Training Psychologists for Rural Practice: Exploring Opportunities and Constraints,” *The Journal of Rural Health*, vol. 35 (2019): 35–41.

^dJulie Q. Morrison, Susan C. Davies, and Amity Noltemeyer, "An Analysis of the Workforce Pipeline in School Psychology," *Contemporary School Psychology* (2020).

^eCaroline Bonham et al., "Training Psychiatrists for Rural Practice: A 20-Year Follow-Up," *Academic Psychiatry*, vol. 38 (2014): 623–26.

Based on the literature we reviewed and interviews with stakeholders, we identified the following incentives that can help address these barriers to recruiting and retaining behavioral health providers:

- **Financial assistance for education.** Representatives from a behavioral health association told us that student loan repayment programs help alleviate the cost of student loans, which is a barrier to recruitment and retention. However, stakeholders from five organizations said scholarship programs are more effective for recruitment than loan repayment programs, due to the upfront costs of attending college and the length of time it takes to pay back student loans. Specifically, three stakeholders suggested that scholarships are more effective for recruiting students from diverse backgrounds. Furthermore, nine studies we reviewed suggested targeted financial support—in the form of scholarships or fellowships—for racial and ethnic minority students as a strategy to increase diversity in the workforce.
- **Early outreach and mentorship.** Stakeholders from seven organizations discussed the need for recruitment activities—such as outreach to students and career education—to start earlier in the education pipeline to encourage more students to consider careers in the behavioral health field. Researchers from one organization and literature we reviewed also suggested developing mentorships to promote awareness of opportunities in behavioral health as a recruitment and retention strategy. For example, one study found that connecting students in rural shortage areas with behavioral health providers in other areas through virtual mentorship programs can improve recruitment.³²
- **Leveraging the existing workforce through telehealth.** Delivery approaches, like telehealth, can help increase the capacity of the existing workforce to provide behavioral health services. For example, we heard from four research organizations that telehealth improves access to behavioral health services, especially for people in remote or rural areas. Additionally, officials from one behavioral health association told us that telehealth has been important for continuity of

³²See Heidi Keeler et al., "Virtual Mentorship Network to Address the Rural Shortage of Mental Health Providers," *American Journal of Preventive Medicine*, vol. 54, no. 6 (2018): 290–95.

care during the COVID-19 pandemic for the providers in their membership. We also previously reported that the enhanced use of telehealth during the pandemic helped improve access to behavioral health care, allowing some providers to meet the increased demand for those services.³³

Actions HHS Agencies Have Taken to Support Recruiting and Retaining Behavioral Health Providers

Based on our review of HHS's 2021 Health Workforce Strategic Plan, as well as interviews with HRSA and SAMHSA officials and stakeholders representing research institutions and behavioral health associations, we found that HHS supports various programs to help recruit and retain behavioral health providers.

Programs to help recruit and retain behavioral health providers that we identified can generally be grouped into four main categories:

- **Fellowship and graduate psychology education** programs provide funding for students or recently graduated practicing health professionals to deliver behavioral health services.
- **Loan repayment** programs provide repayment assistance for eligible providers in exchange for a service commitment of at least 2 years in a health professional shortage area.
- **Scholarship programs** provide awards to students pursuing eligible training programs, and in turn, may require service commitments in health professional shortage areas.
- **Training** programs are designed to provide skills on particular topics, such as cultural competency and coordination of behavioral health and primary care services, often as incentives to retain health care providers.

(See app. III for information on HHS programs in each of these four main categories.)

HRSA and SAMHSA officials, as well as stakeholders we spoke with, most often cited the following three programs as key to increasing the

³³See GAO, *Mental Health Care: Access Challenges for Covered Consumers and Relevant Federal Efforts*, [GAO-22-104597](#) (Washington, D.C.: Mar. 29, 2022).

size, geographic distribution, diversity, and cultural competence of the behavioral health workforce.

- **HRSA's Behavioral Health Workforce Education and Training Program** awards grants to organizations that train graduate-level students of social work, psychology, and other behavioral health disciplines to work with vulnerable populations, particularly children, adolescents, and transitional-aged youth at risk for behavioral health disorders. According to HRSA, from academic years 2014 through 2020, program awardees supported the clinical training of 20,322 graduate-level social workers, psychologists, school and clinical counselors, psychiatric nurse practitioners, marriage and family therapists, and behavioral health paraprofessionals, including community health workers and substance use/addictions workers.

Under the American Rescue Plan Act of 2021, HHS received an increase in funding for behavioral health programs. In addition to the \$112 million appropriated to the program for fiscal year 2021, the American Rescue Plan Act of 2021 appropriated another \$100 million to support the Behavioral Health Workforce Education and Training Program for use until expended.³⁴

- **HRSA's National Health Service Corps** provides loan repayment and scholarships to various types of providers, including behavioral health providers such as psychiatrists and psychologists. In return, the providers are to agree to practice in underserved areas for at least 2 years. In 2021, HRSA reported that over 80 percent of behavioral health providers that graduated from the programs from 2012 through 2020 remained practicing in underserved areas.

In addition to the \$430 million appropriated for fiscal year 2021, the American Rescue Plan Act of 2021 appropriated another \$800 million, for use until expended, to support activities under the National Health Service Corps.³⁵ This additional funding allows HHS to increase the number of scholarship and loan repayment awards to students in behavioral health programs.

- **SAMHSA's Minority Fellowship Program** awards grant funding to behavioral health organizations that offer scholarships, tuition assistance, and professional development training to students pursuing graduate-level education in the behavioral health field.

³⁴Pub. L. No. 117-2, §2711, 135 Stat. 4,48.

³⁵Pub. L. No. 117-2, § 2602, 135 Stat. at 44.

According to SAMHSA, the Minority Fellowship Program aims to increase the number of minorities and culturally competent providers in the behavioral health workforce.³⁶ Stakeholders from four organizations we interviewed told us the program has been an important tool for recruiting behavioral health providers from diverse backgrounds who provide services to underserved areas. Of the 410 Minority Fellowship Program fellows funded in fiscal years 2020 and 2021, 72 percent (294 fellows) considered themselves to be from racial minority groups, according to SAMHSA. The program was appropriated about \$16.1 million for fiscal year 2021.

In April 2022, HHS released its Report to Congress on the implementation of its Health Workforce Strategic Plan, which affirms that HHS plans to coordinate externally and internally across agencies to identify performance metrics and support behavioral health workforce programs identified in the implementation plan, such as the three programs cited above as key by HHS officials and stakeholders. HHS officials said the department is developing processes to track HHS-wide behavioral health initiatives, including workforce initiatives, such as a technology platform for consolidating data collected from the agency's behavioral health efforts.

Agency Comments

We provided a draft of this report to HHS and BLS for review and comment. HHS and BLS provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Health and Human Services, the Secretary of Labor, and other interested parties. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or hundrupa@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on

³⁶SAMHSA defines culturally competent as respectful and inclusive of the health beliefs and attitudes, healing practices, and cultural and linguistic needs of different population groups. According to SAMHSA, the Minority Fellowship Program also aims to improve behavioral health care outcomes for racial and ethnic populations. The program also seeks to train and better prepare behavioral health practitioners to more effectively treat and serve people of different cultural and ethnic backgrounds.

the last page of this report. Major contributors to this report are listed in appendix IV.

A handwritten signature in black ink that reads "Alyssa M. Hundrup". The signature is written in a cursive style with a large initial 'A' and a stylized 'H'.

Alyssa M. Hundrup
Director, Health Care

Appendix I: Objectives, Scope, and Methodology

In this report, we describe

1. available information on the behavioral health workforce, including information on workforce size and composition;
2. key barriers to and incentives for recruiting and retaining behavioral health providers; and
3. HHS agencies' actions to support recruiting and retaining behavioral health providers.

Summarizing Available Information on the Behavioral Health Workforce

To describe the behavioral health workforce, including its size and composition of providers, we reviewed the most recent publicly available federal sources of behavioral health workforce estimates. These were 2020 data from the Substance Abuse and Mental Health Services Administration's (SAMHSA) Mental Health and Substance Use Disorder Practitioner Data grant, and the Health Resources Services Administration's (HRSA) 2017-2030 Behavioral Health Workforce Projection, published in 2020. We also reviewed workforce data, published annually, from the Bureau of Labor Statistics (BLS), within the Department of Labor, which includes information on certain occupations that may be considered part of the behavioral health workforce.¹

We reviewed reports and other agency documents, such as technical documentation supporting workforce projections, grants, and cooperative agreements with organizations supporting HHS's workforce efforts. Specifically, we reviewed data and documentation reports, developed for

¹For this report, we generally refer to all licensed and non-licensed paraprofessionals involved in the delivery of behavioral health services as behavioral health providers. Our review also included meeting with officials at the Census Bureau, within the Department of Commerce, to better understand comments from researchers and other agency officials on their use of Census population data. We also met with officials at the Centers for Medicaid & Medicare Services to better understand comments from researchers and other agency officials on their use of provider information collected in the National Plan and Provider System. Officials told us the agency does not provide workforce estimates from this provider information.

SAMHSA by researchers at George Washington University, which describe efforts to enumerate the workforce as part of the agency's Mental Health and Substance Use Disorder Practitioner Data grant. We reviewed published research from HRSA's behavioral health workforce research center at the University of Michigan. We also reviewed HHS's Health Workforce Strategic Plan 2021 and its further implementation plan published in May 2022. We examined information in both documents related to HHS's efforts and plans related to making workforce information available.²

To assess the reliability of the estimates and behavioral health workforce projections from SAMHSA and HRSA, and the workforce data from BLS, we interviewed relevant agency officials and reviewed documentation about the data. We determined that the data were sufficiently reliable for describing information on the behavioral health workforce.

Stakeholder Interviews

We interviewed stakeholders that represented a range of roles and perspectives with respect to workforce-related data and information used to describe the behavioral health workforce and the recruitment and retention of behavioral health providers. We spoke with federal officials, as well as officials at seven behavioral health associations, four university-affiliated research groups, and two non-profit research organizations with knowledge about relevant topics, such as behavioral health workforce development. We selected researchers we identified as having relevant knowledge based on their published work. We identified certain organizations and researchers based on the recommendations of other stakeholders. We also reviewed reports, research, and other documentation provided by these stakeholders that pertained to our objectives. (See table 3.)

Additionally, we received information from officials with HHS's Office of the Assistant Secretary for Health and interviewed relevant officials from that agency and SAMHSA officials regarding the Behavioral Health

²See Department of Health and Human Services, *Health Workforce Strategic Plan* (Washington, D.C.: November 2021); and Department of Health and Human Services, *Report to Congress: Implementation of the Health Workforce Strategic Plan* (Washington, D.C.: May 2022). HRSA officials noted that HHS transmitted the implementation report to Congress on April 11, 2022. HRSA published the Report to Congress on the HRSA website on May 4, 2022.

Coordinating Council, established by HHS in May 2021. The council includes multiple HHS agencies and is intended to facilitate collaboration among the agencies in addressing behavioral health issues.

Table 3: Federal Agencies, Behavioral Health Associations, and Researchers Interviewed about Behavioral Health Workforce Issues

Type of Stakeholder	Organization
Federal agencies	<ul style="list-style-type: none"> • Bureau of Labor Statistics • Centers for Medicare & Medicaid Services • Health Resources and Services Administration • Office of the Assistant Secretary for Planning and Evaluation • Substance Abuse and Mental Health Services Administration
Behavioral health associations	<ul style="list-style-type: none"> • American Association for Marriage and Family Therapy • American Psychological Association • Black Mental Health Alliance • NAADAC, the Association for Addiction Professionals • National Association for Behavioral Healthcare • National Council for Mental Wellbeing • National Latino Behavioral Health Association
Researchers	<ul style="list-style-type: none"> • Annapolis Coalition on the Behavioral Health Workforce • Behavioral Health Workforce Research Center, University of Michigan School of Public Health • Bipartisan Policy Center • Institute of Justice & Well-Being, Binghamton University, State University of New York • Health Workforce Research Center at the George Washington University Fitzhugh Mullan Institute for Health Workforce Equity • Ohio Education Research Center, Ohio State University

Source: GAO. | GAO-23-105250

Identifying and Summarizing Key Barriers to and Incentives for Recruiting and Retaining Behavioral Health Providers

To identify and summarize key barriers to and incentives aimed at addressing the recruitment and retention of behavioral health providers, we conducted a literature review of relevant peer-reviewed research published from January 2011 through October 2021.³ We identified

³We limited our search to literature published in the last 10 years—from January 2011 through October 2021—to identify and understand relevant research developments in this area, as well as retrieve articles to help provide a historical overview of research on the topic of the behavioral health workforce in the United States.

studies through a search of multiple bibliographic databases, including Scopus, MEDLINE, CINAHL, and PsychInfo, using terms such as “recruitment,” “retention,” and “behavioral health care,” among others. Of the 363 citations we identified, we examined 80 studies, and found 27 to be methodologically sound and relevant to our research objective to be included in our final review.

To determine whether articles were methodologically sound for the purposes of inclusion in our review, we considered the study sample, data source, and the measures or instruments used in the research. For those 27 sources we found to be methodologically sound, we then used a structured format to identify and summarize (1) the barriers, incentives, or programs studied; and (2) key factors affecting recruitment or retention of behavioral health providers identified in the article. (For a list of the selected studies we reviewed, see the bibliography page at the end of this report.)

Describing HHS Agencies’ Actions to Support Recruiting and Retaining Behavioral Health Providers

To describe HHS agencies’ actions to support recruiting and retaining individuals into the behavioral health workforce, we reviewed the most recently available and relevant documentation on HRSA’s and SAMHSA’s programs:

- HRSA’s 2019 Report to Congress on the National Health Service Corps,
- HRSA’s report on the Behavioral Health Workforce Education and Training Programs for academic years 2014-2020, and
- SAMHSA’s demographic data on Minority Fellowship Fellows for fiscal years 2020-2021.

We also reviewed HHS’s Health Workforce Strategic Plan 2021 and its May 2022 implementation plan to obtain information on existing programs and future planned actions to support recruiting and retaining behavioral health providers.

We conducted this performance audit from May 2021 to October 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Workforce Data Provided by the Bureau of Labor Statistics

This appendix includes estimates from two information sources: (1) Employment Projections, and (2) the Occupational Employment and Wage Statistics program. Both are available from the Bureau of Labor Statistics (BLS) for select behavioral health providers and other providers who may be involved in the delivery of behavioral health services.

Employment Projections

Each year, BLS produces national 10-year projections to describe anticipated long-term structural changes in the economy and national trends. BLS develops projections using a model-based program that includes other BLS sources, such as the Occupational Employment and Wage Statistics data, as well as data available on the economy. In 2021, BLS published the 2020-2030 projections.¹ These projections include 295 industries for nearly 800 occupations in the labor market, including certain behavioral health providers, such as marriage and family therapists and psychiatrists, as well as providers that provide general health care services, but may also be involved in the delivery of behavioral health services. (See table 4.)

Table 4: Employment Projections for Select Occupations that May Provide Behavioral Health Services, Bureau of Labor Statistics (2020-2030 Projection)

Occupation	Estimate of the number of individuals in the workforce	Estimate of the number of individuals in the workforce
	2020	2030
Child, family, and school social workers	335,300	377,400
Clinical, counseling, and school psychologists	118,800	131,100
Community and social service specialists, all other	95,500	108,200
Community health workers	64,100	77,600
Counselors, all other	54,300	59,200

¹The BLS 2020-2030 projections were the most recent projections available at the time that we conducted our work.

**Appendix II: Workforce Data Provided by the
Bureau of Labor Statistics**

Occupation	Estimate of the number of individuals in the workforce	Estimate of the number of individuals in the workforce
	2020	2030
Health education specialists	61,100	68,700
Healthcare social workers	184,900	209,300
Marriage and family therapists	73,200	85,100
Mental health and substance abuse social workers	124,000	142,500
Nurse practitioners	220,300	335,200
Physician assistants	129,400	169,500
Psychiatric aides	54,100	58,100
Psychiatric technicians	91,600	103,300
Psychiatrists	28,100	31,600
Psychologists, all other	55,200	56,300
Rehabilitation counselors	104,500	115,400
Social and human service assistants	417,600	487,100
Social workers, all other	71,400	75,500
Substance abuse, behavioral disorder, and mental health counselors	327,500	402,600
Therapists, all other	28,100	32,300

Source: Department of Labor, Bureau of Labor Statistics. | GAO-23-105250

Note: The Bureau of Labor Statistics does not include a standard error for employment projection estimates. Data presented in the table are for a select set of occupations that may be involved in the delivery of behavioral health services. The Bureau of Labor Statistics projections include data for occupations with standard occupational codes for a 10-year projection period. The table includes data for the 2020-2030 projections, published in 2021. For additional occupations and technical documentation, see Employment Projections, accessed August 19, 2022, <https://www.bls.gov/emp>.

Occupational Employment and Wage Statistics

The Occupational Employment and Wage Statistics program develops information annually to describe occupational employment and wages at the national, state, metropolitan, and nonmetropolitan areas for approximately 830 occupations. BLS funds a semi-annual survey, which state workforce agencies administer, to obtain information on the number of individuals employed in certain occupations. The survey provides national occupational estimates for 415 industries for more than 800 occupations, including certain behavioral health occupations. Aggregated data from the survey includes information on health care providers that provide general health care services, as well as those involved in the delivery of behavioral health services. (See table 5.)

**Appendix II: Workforce Data Provided by the
Bureau of Labor Statistics**

Table 5: Occupational Employment Estimates for Select Occupations that May Provide Behavioral Health Services, Bureau of Labor Statistics (May 2021)

Occupation	Total employment (2021)	Relative standard error^a
Clinical and counseling psychologists	58,100	2.6
School psychologists	57,110	2.1
Psychologists, all other	13,800	3.4
Marriage and family therapists	54,800	3.4
Rehabilitation counselors	90,310	2.3
Substance abuse, behavioral disorder, and mental health counselors	310,880	1.0
Counselors, all other	29,480	4.1
Child, family, and school social workers	340,050	1.1
Healthcare social workers	173,860	1.2
Mental health and substance abuse social workers	113,810	1.5
Social workers, all other	49,730	1.7
Community health workers	61,010	2.2
Psychiatric aides	39,140	2.5

Source: Department of Labor, Bureau of Labor Statistics. | GAO-23-105250

Note: The Bureau of Labor Statistics funds a semi-annual survey that is administered by state workforce agencies to a sample of employers to identify wage and salary workers in non-farm industries. The survey provides national aggregated employment estimates for approximately 830 occupations across 415 industries. Data presented in the table are for a select set of occupations included in the Occupational Employment and Wage Statistics that may be involved in the delivery of behavioral health services. The table includes data across all industries from Bureau of Labor Statistics' May 2021 analysis, which includes survey data spanning November 2018 to May 2021 for approximately 1.1 million employers. Additional information on the standard error associated with estimates is found on the Bureau of Labor Statistics website, see *Occupational Employment and Wage Statistics*, accessed August 19, 2022, <https://www.bls.gov/oes>.

^aThe relative standard error is a measure of the reliability of a survey statistic. The smaller the relative standard error, the more precise the estimate.

Appendix III: Select Department of Health and Human Services Agencies' Programs for Recruiting and Retaining Health Care Providers

This appendix includes information on select recruitment and retention programs administered by the Department of Health and Human Services' (HHS) Health Resources and Services Administration and the Substance Abuse and Mental Health Services Administration. Some programs target the broader health care workforce, such as the National Health Service Corps, but can include behavioral health-related occupations. Other programs specifically focus on behavioral health providers, such as the Health Resources and Services Administration's Graduate Psychology Education Program.

Fellowship and Graduate Psychology Education Programs

HHS funds graduate and post-graduate training for practicing health care professionals through fellowships and residency programs to incentivize providing services in high-need areas and to vulnerable populations. (See table 6.)

Table 6: Fellowship and Graduate Psychology Education Programs, Department of Health and Human Services (HHS)

HHS agency	Fellowship or graduate psychology education program	Description
Health Resources and Services Administration	Addiction Medicine Fellowship Program, Addiction Psychiatry Fellowship Program	Fellowship program intended to expand the number of addiction medicine specialists who will work in underserved community-based settings that integrate primary care with mental health disorders, and substance abuse disorder prevention and treatment services.
Health Resources and Services Administration	Graduate Psychology Education Program	Practice-based training experience for psychology students provided through grants for the planning, development, or operation of accredited graduate, doctoral, doctoral internship, and post-doctoral psychology fellowship programs that address access for underserved populations.

Appendix III: Select Department of Health and Human Services Agencies' Programs for Recruiting and Retaining Health Care Providers

HHS agency	Fellowship or graduate psychology education program	Description
Substance Abuse and Mental Health Services Administration	Minority Fellowship Program	Fellowship intended to expand the number of mental and substance use disorder professionals who provide culturally competent service.

Source: HHS, Bureau of Health Workforce. | GAO-23-105250

Loan Repayment Programs

HHS offers student loan repayment programs to help address challenges rural communities and other underserved areas may face in recruiting and retaining behavioral health care providers. (See table 7.)

Appendix III: Select Department of Health and Human Services Agencies' Programs for Recruiting and Retaining Health Care Providers

Table 7: Student Loan Repayment Programs, Department of Health and Human Services (HHS)

HHS agency	Loan repayment program	Description
Health Resources and Services Administration	National Health Service Corps Loan Repayment Program	Loan repayment program for eligible primary care, dental, and mental health clinicians intended to provide culturally competent, interdisciplinary health care services to underserved populations located in designated health professional shortage areas (HPSA) in exchange for repayment of outstanding qualifying educational loans.
Health Resources and Services Administration	National Health Service Corps Rural Community Loan Repayment Program	Loan repayment program, in coordination with the Health Resources and Services Administration's Rural Communities Opioid Response Program, for eligible individuals working in HPSAs to combat the opioid epidemic in the nation's rural communities.
Health Resources and Services Administration	National Health Service Corps Substance Use Disorder Workforce Loan Repayment Program	Loan repayment program for medical, physician assistant, nursing, and behavioral/ mental health clinicians with specific training and credentials to provide evidence-based substance use disorder treatment, serving at a National Health Service Corps-approved substance use disorder treatment facility that is located in a designated mental health or primary care HPSA.
Health Resources and Services Administration	Nurse Corps Loan Repayment Program	Loan repayment program for registered nurses including advanced practice registered nurses, working at eligible health care facilities with a critical shortage of nurses or serving as nurse faculty in eligible schools of nursing. The program includes psychiatric-mental health nurse practitioners.

Source: HHS officials and HHS, Bureau of Health Workforce. | GAO-23-105250

Scholarship Programs

HHS offers scholarship programs to fund students' health care education in exchange for practicing in rural communities and other underserved areas that may face challenges in recruiting and retaining health care providers. (See table 8.)

Table 8: Scholarship Programs, Department of Health and Human Services (HHS)

HHS agency	Scholarship programs	Description
Health Resources and Services Administration	National Health Service Corps Scholarship Program	Scholarships provided to students pursuing eligible health professions training who commit to provide primary care services in health professional shortage areas.
Health Resources and Services Administration	Scholarship for Disadvantaged Students	Scholarships provided to health professional students from disadvantaged backgrounds enrolled in health professions degree programs.

Appendix III: Select Department of Health and Human Services Agencies' Programs for Recruiting and Retaining Health Care Providers

HHS agency	Scholarship programs	Description
Health Resources and Services Administration	Nurse Corps Scholarship Program	Scholarships provided to nursing students who commit to provide direct patient care at a health care facility with a critical shortage of nurses. The program includes psychiatric-mental health nurse practitioners.

Source: HHS officials and HHS, Bureau of Health Workforce. | GAO-23-105250

Training Programs

HHS administers various training programs to help retain health care providers from disadvantaged and underrepresented backgrounds, with the intent to strengthen the supply of providers and to help develop providers' knowledge, competencies, experience, and technical skills. (See table 9.)

Appendix III: Select Department of Health and Human Services Agencies' Programs for Recruiting and Retaining Health Care Providers

Table 9: Training Programs, Department of Health and Human Services (HHS)

HHS agency	Training programs	Description
Health Resources and Services Administration	Behavioral Health Workforce Education and Training Program for Paraprofessionals	Program intended to develop and expand community-based experiential training and increase the supply of students preparing to become behavioral health professionals or paraprofessionals, while also improving distribution of a quality behavioral health workforce.
Health Resources and Services Administration	Behavioral Health Workforce Education and Training Programs for Professionals	Programs intended to increase the supply of behavioral health professionals and coordination with community-based partners, such as hospitals, crisis centers, state and local health departments, emergency departments, faith-based organizations, first responders, and judicial systems.
Health Resources and Services Administration	Integrated Substance Use Disorder Training Program	Program intended to expand of the number of nurse practitioners, physician assistants, health service psychologists, and social workers trained to provide mental health and substance use disorders services in underserved community-based settings that integrate primary care and mental health and substance use disorders services.
Health Resources and Services Administration	Nurse Education Practice, Quality and Retention: Interprofessional Collaborative Practice Program: Behavioral Health Integration	Promotion of team-based care models in interprofessional nurse-led primary care teams in rural or underserved areas that increases the training of the current and future nursing workforce, and strengthens their ability to provide integrated behavioral health care services in primary care settings.
Health Resources and Services Administration	Opioid Workforce Expansion Programs for Professionals and Paraprofessionals	Program for training at interprofessional and team-based care field placement sites and internships integrating behavioral health and primary care, intended to increase the number of behavioral health professionals and transform integrated behavioral health and primary care teams.
Health Resources and Services Administration	Opioid-Impacted Family Support Program	Program intended to expand the number of peer support specialists and other paraprofessionals trained to work in integrated, interprofessional teams to serve children whose parents are affected by opioid use disorders and other substance use disorders.
Health Resources and Services Administration	Primary Care Training and Enhancement: Integrating Behavioral Health into Primary Care Program	Programs for current and future primary care clinicians that integrate behavioral health care into primary care, particularly in rural and underserved settings, with a special emphasis on the treatment of opioid use disorder.
Substance Abuse and Mental Health Services Administration	Centers of Excellence for Behavioral Health Disparities	Training and technical assistance provided for health care practitioners on issues related to addressing behavioral health disparities among African Americans; the Lesbian, Gay, Bisexual, Transgender, and Queer community; and older individuals.
Substance Abuse and Mental Health Services Administration	Historically Black Colleges and Universities Center of Excellence in Behavioral Health	Training for Historically Black College and University students to obtain advanced degrees in the behavioral health field.

Source: HHS, Bureau of Health Workforce. | GAO-23-105250

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Alyssa M. Hundrup, (202) 512-7114, hundrupa@gao.gov

Staff Acknowledgments

In addition to the contact named above, Karen Doran (Assistant Director), Kimberly Lloyd Perrault (Analyst-in-Charge), Drew Long, Kendra Sippel-Theodore, and Emily Tomsick made key contributions to this report. Also contributing to this report were Sonia Chakrabarty, Joycelyn Cudjoe, Leia Dickerson, Kimberley Granger, Kathleen McQueeney, Emily Wilson Schwark, Roxanna Sun, and Jeffrey Tamburello.

Bibliography

This bibliography contains citations for the 27 studies we reviewed. We found these 27 studies to be methodologically sound, and we then used a structured format to identify and summarize (1) the barriers, incentives, or programs studied; and (2) key factors affecting recruitment or retention of behavioral health providers identified in each study.

Edward J. Ameen et al. "Internship Factors Associated with the Mobility of Early Career Psychologists." *Training and Education in Professional Psychology*, vol. 15, no. 3 (2021): 195–201.

Caroline Bonham et al. "Training Psychiatrists for Rural Practice: A 20-Year Follow-Up." *Academic Psychiatry*, vol. 38 (2014): 623–26.

Castillo, Jose M., Michael J. Curtis, and Sim Yin Tan. "Personnel Needs in School Psychology: A 10-Year Follow-Up Study on Predicted Personnel Shortages." *Psychology in the Schools*, vol. 51, no. 8 (2014): 832–49.

Chandler, Daphne R. "Proactively Addressing the Shortage of Blacks in Psychology: Highlighting the School Psychology Subfield." *Journal of Black Psychology*, vol. 37, no. 1 (2011): 99–127.

Susan A. Chapman et al. "Utilization and Economic Contribution of Psychiatric Mental Health Nurse Practitioners in Public Behavioral Health Services." *American Journal of Preventive Medicine*, vol. 54, no. 6 (2018): 243–49.

Yi Ding et al. "Recruitment and Retention of Bilingual Graduate Students in School Psychology: Efforts and Challenges in Increasing Professional Diversity." *School Psychology International*, vol. 42, no. 6 (2021): 569–89.

Marisa Elena Domino et al. "Training Psychologists for Rural Practice: Exploring Opportunities and Constraints." *The Journal of Rural Health*, vol. 35 (2019): 35–41.

Jennifer M. Doran et al. "Graduate Debt in Psychology: A Qualitative Analysis." *Training and Education in Professional Psychology*, vol. 10, no. 4 (2016): 179–87.

Foster, Gwen, Meghan Brenna Morris, and Sirojudin Sirojudin. "Mental Health Workforce Change Through Social Work Education: A California Case Study." *Journal of Social Work Education*, vol. 49, no. 3 (2013): 490–505.

Grapin, Sally L., Erica T. Lee, and Dounia Jaafar. "A Multilevel Framework for Recruiting and Supporting Graduate Students from Culturally Diverse Backgrounds in School Psychology Programs." *School Psychology International*, vol. 36, no. 4 (2015): 339–57.

Sally L. Grapin et al. "Student Perspectives on Recruiting and Orienting Prospective School Psychology Trainees." *School Psychology*, vol. 36, no. 4 (2021): 261-70.

Han, Xinxin, and Leighton Ku. "Enhancing Staffing In Rural Community Health Centers Can Help Improve Behavioral Health Care." *Health Affairs*, vol. 38, no. 12 (2019): 2061–68.

Heidi Keeler et al. "Virtual Mentorship Network to Address the Rural Shortage of Mental Health Providers." *American Journal of Preventive Medicine*, vol. 54, no. 6 (2018): 290–95.

Mann, Angela, Jose Castillo, and Mary Alice Myers. "A Case Example of One State's Efforts to Measure and Address the Critical Shortage of School Psychologists." *Psychology in the Schools*, vol. 56 (2019): 1716–36.

Morrison, Julie Q., Susan C. Davies, and Amity Noltemeyer. "An Analysis of the Workforce Pipeline in School Psychology." *Contemporary School Psychology* (2020).

Luc R. Pelletier et al. "Effectiveness of a Psychiatric–Mental Health Nurse Residency Program on Retention." *Journal of the American Psychiatric Nurses Association*, vol. 25, no. 1 (2019): 66–75.

Andy V. Pham et al. "Incorporating Social Justice Advocacy and Interdisciplinary Collaborative Training in the Recruitment and Retention of Diverse Graduate Students." *Contemporary School Psychology*, vol. 25 (2021): 344–57.

Mara Pheister et al. "Growing the Psychiatry Workforce Through Expansion or Creation of Residencies and Fellowships: The Results of a Survey by the AADPRT Workforce Task Force." *Academic Psychiatry* (2021).

Proctor, Sherrie L., and Stephen D. Truscott. "Missing Voices: African American School Psychologists' Perspectives on Increasing Professional Diversity." *The Urban Review*, vol. 45 (2013): 355–75.

Sherrie L. Proctor et al. "Recruitment of Diverse Students in School Psychology Programs: Direction for Future Research and Practice." *Contemporary School Psychology*, vol. 18 (2014): 117–26.

Bibliography

- Sherrie L. Proctor et al. "Examining Racial Microaggressions, Race/Ethnicity, Gender, and Bilingual Status with School Psychology Students: The Role of Intersectionality." *Contemporary School Psychology*, vol. 22, no. 3 (2018): 355–68.
- Stephanie L. Schmitz et al. "Increasing School-Based Mental Health Services with a 'Grow Your Own' School Psychology Program." *Contemporary School Psychology* (2021).
- Wesley Sowers et al. "Progress in Workforce Development Since 2000: Advanced Training Opportunities in Public and Community Psychiatry." *Psychiatric Services*, vol. 62, no. 7 (2011): 782–88.
- Elizabeth Reisinger Walker et al. "Psychiatric Workforce Needs and Recommendations for the Community Mental Health System: A State Needs Assessment." *Psychiatric Services*, vol. 66, no. 2 (2015): 115–17.
- Shinobu Watanabe-Galloway et al. "Recruitment and Retention of Mental Health Care Providers in Rural Nebraska: Perceptions of Providers and Administrators." *Rural and Remote Health*, vol. 15, no. 3392 (2015): 1-13.
- Ellie L. Young et al. "Recruiting and Retaining School Psychologists: The Experiences of District Level Administrative Supervisors." *Psychology in the Schools*, vol. 58 (2021): 1501–17.
- Ellie L. Young et al. "Retention and Job Satisfaction of School Psychologists." *Psychology in the Schools*, vol. 58 (2021): 585–600.

Related GAO Products

Mental Health Care: Access Challenges for Covered Consumers and Relevant Federal Efforts. [GAO-22-104597](#). Washington, D.C.: March 29, 2022.

Behavioral Health and COVID-19: Higher-Risk Populations and Related Federal Relief Funding. [GAO-22-104437](#). Washington, D.C.: December 10, 2021.

Medicaid: HHS's Preliminary Analyses Offer Incomplete Picture of Behavioral Health Demonstration's Effectiveness. [GAO-21-394](#). Washington, D.C.: May 17, 2021.

Behavioral Health: Patient Access, Provider Claims Payment, and Effect of COVID-19 Pandemic. [GAO-21-437R](#). Washington, D.C.: March 31, 2021.

National Health Service Corps: Program Directs Funding to Areas with Greatest Provider Shortages. [GAO-21-323](#). Washington, D.C.: April 30, 2021.

Substance Use Disorder: Reliable Data Needed for Substance Use Prevention and Treatment Block Grant Program. [GAO-21-58](#). Washington, D.C.: December 14, 2020.

COVID-19: Urgent Actions Needed to Better Ensure an Effective Federal Response. [GAO-21-191](#). Washington, D.C.: November 30, 2020.

Mental Health and Substance Use: State and Federal Oversight of Compliance with Parity Requirements Varies. [GAO-20-150](#). Washington, D.C.: December 13, 2019.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its [website](#) newly released reports, testimony, and correspondence. You can also [subscribe](#) to GAO's email updates to receive notification of newly posted products.

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <https://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#).
Subscribe to our [RSS Feeds](#) or [Email Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at <https://www.gao.gov>.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: <https://www.gao.gov/about/what-gao-does/fraudnet>

Automated answering system: (800) 424-5454 or (202) 512-7700

Congressional Relations

A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707
U.S. Government Accountability Office, 441 G Street NW, Room 7814,
Washington, DC 20548



Please Print on Recycled Paper.