U.S. Government Accountability Office

Health Care Workforce: Federal Grants Supporting Mental Health

GAO-26-107951
Q&A
Report to Congressional Committees
March 12, 2026

Why This Matters

There are over 17 million health professionals in the U.S. who serve in a variety of clinical and non-clinical roles, according to the Department of Health and Human Services (HHS). These health professionals often work in demanding and stressful environments, which can affect their well-being and mental health. The Centers for Disease Control and Prevention (CDC) reported in May 2022 that the COVID-19 pandemic led to new and worsening mental health conditions for many health professionals, including depression and anxiety. Mental health conditions can adversely affect the delivery of health care and thus patient safety, according to the National Academy of Sciences, Engineering, and Medicine.

In 2022, the Dr. Lorna Breen Health Care Provider Protection Act (Breen Act) authorized grants to hospital systems, health professions' schools, and other entities to address mental health conditions, including substance use disorders. From calendar years 2022 through 2024, HHS awarded COVID-19 relief funding to three grant programs that supported a range of activities designed to promote mental health and resiliency—the ability to positively adapt and endure in stressful situations—among certain health professionals.

The Breen Act includes a provision for us to review these grant programs. This report describes available information, as of February 2025, on the prevalence and severity of mental health conditions, including substance use disorders, among health professionals; the grant programs; and HHS's oversight of these grant programs.

Key Takeaways

- The prevalence of mental health conditions, such as anxiety and substance use disorders, varies across health professionals, according to literature we reviewed. While we found studies that were generalizable across health professions, these studies did not include data on the severity of these conditions among health professionals. Some studies that were conducted during the COVID-19 pandemic noted that mental health conditions among health professionals were exacerbated during this time period.
- Common factors negatively affecting mental health among health professionals include stressful work environments, lack of inclusion in decision-making (i.e., workers not participating in decision-making), and stigma around mental health, according to HHS and other government reports, a grantee study, and representatives of stakeholder organizations we interviewed.
- HHS officials identified three grant programs focused on addressing mental health that specifically targeted health professionals, which includes providers and students. These grant programs, which ended in December 2024, provided $103.2 million in funding to 45 grant awardees (or grantees), from

calendar years 2022 through 2024 for activities such as providing mental health screening and services. Grantees included organizations such as hospital systems and universities and trained up to approximately 135,000 participants a year.

- Some grantees reported a variety of benefits of the grant programs, including higher job retention and reduced depression and anxiety of participants as compared to non-participants. They also cited challenges related to resources, organizational commitment to well-being, and stigma.

Who makes up the health professional workforce?

The health professional workforce includes people working in both clinical and non-clinical professions. Clinical health professionals include physicians and nurses as well as behavioral health, oral health, public health, and allied health professionals, such as physical therapists, and paraprofessionals, such as community health workers. Non-clinical health professionals include health care support personnel such as administrative, facilities, and operations and maintenance staff. (See fig. 1).

Figure 1: Types of Health Professionals Included in the Health Professional Workforce

Source: GAO analysis of Department of Health and Human Services (HHS) Promoting Resilience and Mental Health Among Health Professional Workforce grant documentation and other HHS documentation; RaulAlmu/stock.adobe.com (illustrations). | GAO-26-107951

What does available literature show about the prevalence and severity of mental health conditions among health professionals?

We found there is a range in the prevalence of mental health conditions among health professionals that varies by profession, according to literature we reviewed. Commonly studied mental health conditions among health professionals include depression, anxiety, substance use disorders, and the related topic of suicide.[1] These conditions can also occur together. We found studies that included prevalence data that were generalizable to all health care professionals. We also found non-generalizable studies with prevalence data that were specific to a particular subset of health care professionals, such as nurses. Some of these studies were conducted during the COVID-19 pandemic and noted that mental health conditions were exacerbated during this time period.

- **Depression and anxiety.** An estimated 34 percent of health care workers, including physicians and nurses, reported experiencing symptoms of depression and 57 percent reported experiencing symptoms of anxiety in 2022, according to a CDC analysis of nationally representative generalizable data of health workers.[2]

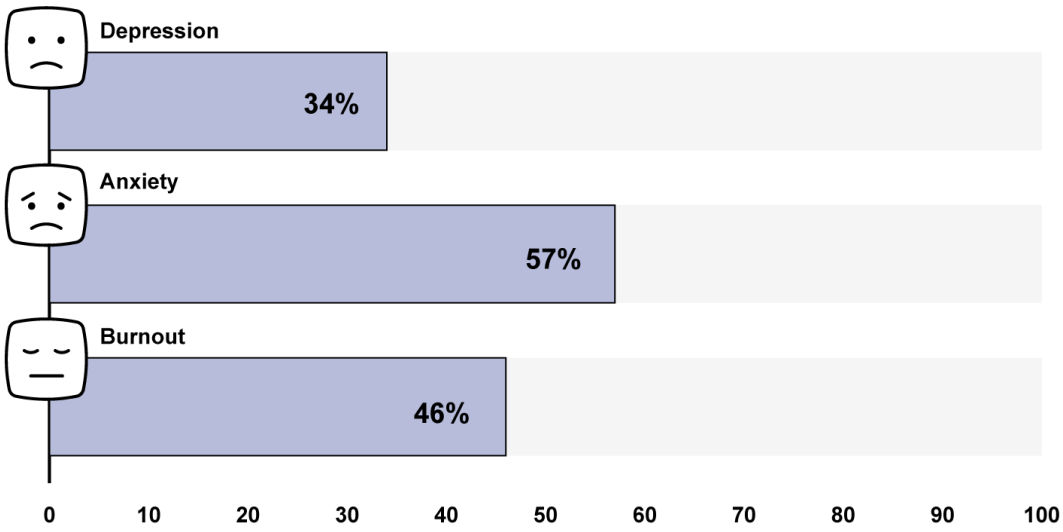
- **Substance use disorders.** Seven percent of nurse respondents reported substance use disorder, according to a non-generalizable, online survey and mailed questionnaire administered to nurses from 2020 through 2021.[3] We found no generalizable studies on substance use disorders among health professionals in our literature review.
- **Suicide**. The incidence rate of suicide among female nurses was between 21 percent and 41 percent higher than the general female population from 2018 through 2021, according to a study using generalizable mortality data from 30 states and the District of Columbia. The rate among male nurses was comparable to that of the general male population.[4]

Literature we reviewed did not identify generalizable data on the severity of these conditions among health professionals, such as the degree to which a mental health condition affects an individual's functioning and well-being for the health professional workforce.

Additionally, we also reviewed literature on the prevalence of burnout. Burnout is a common expression of mental health among health professionals, according to HHS. It includes emotional exhaustion, depersonalization (e.g., detachment from patients), and feelings of ineffectiveness. (See fig. 2.)

- An estimated 46 percent of health care workers reported experiencing burnout often or very often in 2022 during the COVID-19 pandemic, up from an estimated 32 percent in 2018, according to a CDC analysis of nationally representative data on health workers.[5]
- Twenty-nine percent of physicians, 35 percent of physician assistants, and 37 percent of nurse practitioners who responded reported burnout in 2024, according to a non-generalizable industry survey of health professionals.[6]

Figure 2: Estimated Prevalence of Depression, Anxiety, and Burnout Among Health Professionals, 2022



Source: GAO analysis of Centers for Disease Control and Prevention health worker data of 2022; RaulAlmu/stock.adobe.com (illustrations). | GAO-26-107951

Notes: The margins of error at the 95 percent confidence level were less than 5 percentage points. See Jeannie A. Nigam, R. Michael Barker, Thomas R. Cunningham, et al., "Vital Signs: Health Worker—Perceived Working Conditions and Symptoms of Poor Mental Health—Quality of Worklife Survey, United States, 2018–2022." *Morbidity and Mortality Weekly Report*, vol. 72, no. 44 (2023): 1197–1205.

See appendix 1 for a complete list of studies we reviewed.

What factors negatively affect mental health among health professionals?

Common factors negatively affecting mental health among health professionals include stressful work environments, lack of inclusion in decision-making, and stigma around mental health, according to HHS and other government reports, a grantee study, and interviews with representatives of stakeholder organizations.

Stressful work environments. Stressors specific to the organizational work environment of health care settings include high workloads, long work hours, inadequate staffing levels, administrative burden, and harassment from patients, coworkers, and others in the workplace. This is according to HHS and other government reports, a grantee study, and representatives we interviewed from four stakeholder organizations.

Additionally, the COVID-19 pandemic exacerbated stressful work environments for health professionals. For example, it resulted in an increase in the incidence of depression and anxiety for this group, according to a 2022 U.S. Surgeon General's report.

Lack of inclusion in decision-making. There were a range of societal factors, such as a lack inclusion in decision-making in the workplace, that could adversely affect the mental health of health professionals, according to HHS and other government reports and a grantee study. For example, having limited voice and autonomy at work may be associated with worker burnout, according to a 2022 U.S. Surgeon General's report. Similarly, a CDC analysis of nationally representative data on health workers found that health workers who were able to participate in workplace decisions and who trusted management were less likely to feel depressed.[7]

Stigma around mental health. Stigma can be a factor in health professionals not seeking mental health care, according to HHS and other government reports and representatives of three of the four stakeholder organizations we interviewed. For example, health professionals may be fearful of a breach of their privacy and negative implications for their credentialing and licensing. Stigmatizing questions on hospital credentialing applications often led to health professionals not seeking care for mental health, according to a CDC report on health professional well-being that cited survey results from studies conducted by health professional associations.[8] Such questions include those regarding the applicant's history of mental health conditions, as well as explanations for time off from practice, according to representatives from one of our stakeholder organizations.[9]

See figure 3 for common factors identified that may negatively affect health professionals' mental health.

Figure 3: Common Factors That May Negatively Affect Mental Health Among Health Professionals

Source: GAO analysis of government and professional reports and Department of Health and Human Services (HHS) documentation; GAO and RaulAlmu/stock.adobe.com. | GAO-26-107951

What HHS grant programs have addressed mental health among health professionals?

HHS officials identified three grant programs targeting health professional mental health.[10] These grant programs provided COVID-19 relief funding to 45 grantees, awarding $103.2 million from calendar years 2022 through 2024. Funded by the American Rescue Plan Act of 2021, the grant programs ended in December 2024; however, some of the grantees received a no cost extension to finish out their program activities by December 31, 2025.[11]

Two grant programs awarded funding to 44 grantees. These grantees included organizations such as universities, hospital systems, community health centers, research institutions, and private foundations. One of the grant programs supported health professions students while the other grant program supported health care providers. The third grant program awarded funding to the Technical Assistance Center (TAC) grantee to provide technical assistance to the other 44 grantees to build capacity and provide resources for implementing activities supported with the grant funding.

The three HHS grant programs generally aimed to promote evidence-based and evidence-informed mental health strategies to reduce and address burnout, mental health, and substance use disorders, and to build resilience among health professionals. The overall aim of each of the two grant programs supporting providers and students was similar, but the specific purpose, goals, and target beneficiaries of each grant program differed. For example, the grant program supporting providers focused on promoting mental health and resiliency at the organizational level, such as across a hospital system. The grant program supporting students focused on training activities to support the mental health and resiliency of students and other health professionals in rural and underserved communities. See table 1 for more information on the three grant programs.

Table 1: Characteristics of HHS Grant Programs Focused on Addressing Health Professional Mental Health, January 2022 Through December 2024

Grant program	Purpose	Goals	Target beneficiaries	Award amount (number of grantees)
Promoting Resilience and Mental Health Among Health Professional Workforce	Supported adopting and expanding programs to promote mental health and resiliency	Improve organizational culture to build health professional resiliency	Health care providers and workforce	$30.1 million (10 grantees)
Health and Public Safety Workforce Resilience Training Program	Supported training activities to address mental health conditions and promote resiliency	Address mental health and promote resiliency of health professionals	Health care students and workforce	$67.1 million (34 grantees)
Health and Public Safety Workforce Resiliency Technical Assistance Center	Provided technical assistance to the grantees from grant programs listed above	Create a network to exchange best practices, build grantee capacity and provide resources to address mental health	44 grantees from programs listed above	$5.9 million (1 grantee)

Source: GAO analysis of Department of Health and Human Services (HHS) Notice of Funding Opportunities and Grant Award Data. | GAO-26-107951

Note: Summary award amount data is from the HHS Tracking Accountability in Government Grants System, a database of grants awarded by HHS. The health care workforce may include people working in both clinical professions (e.g., physicians and nurses) and non-clinical professions (e.g., health care support personnel).

What activities did HHS grantees conduct to address mental health among health professionals?

The 44 grantees of the two grant programs supporting providers and students reported conducting a variety of activities to support mental health and measure outcomes, according to analyses by the TAC grantee, HHS data, and interviews with selected grantees.[12] Examples of these activities included the following:

Providing mental health screening and services to individuals. Most of the 44 grantees provided a variety of mental health screening and services to participants of grantee activities, according to a TAC analysis of grantee activities.[13] For example, 38 grantees instituted wellness initiatives (such as physical fitness tools and tobacco cessation support), 31 grantees provided peer and crisis support, and 24 grantees offered mental health screening and services, according to an interim analysis by the TAC grantee. Two of the 44 grantees used funding to provide support for substance use treatment and prevention training, according to representatives of the TAC grantee.

Training individuals on wellness and resilience. The 44 grantees also provided training on a variety of topics, such as wellness and resilience, to health professionals, including the following.

- Providing over 1,300 training courses to health professionals from January 2022 through June 2024, according to HHS data.
- Continuing education training to front-line health care workers and staff, managers and mid-level supervisors, and senior managers and executive leadership, according to HHS data.

See table 2 for more information on the trainings.

Table 2. Characteristics of Trainings Provided Through Two Mental Health Grant Programs, January 2022 Through June 2024

Grant program	Reporting period	Profession of participants (top 3)	Number of participants
Promoting Resilience and Mental Health Among Health Professional Workforce	January 2022-June 2022[a]	Other[b] Nursing Medicine	37,945
	July 2022- June 2023	Other[b] Nursing Behavioral health	55,738
	July 2023 - June 2024[c]	Other[b] Nursing Medicine	69,997
Health and Public Safety Workforce Resilience Training Program	January 2022 -June 2022[a]	Other[b] Behavioral health Medicine	14,782
	July 2022 - June 2023	Other[b] Medicine Nursing	45,530
	July 2023 – June 2024[c]	Other[b] Medicine Nursing	65,397

Source: GAO analysis of Health Resources & Services Administration Data Dashboard data. | GAO-26-107951

Note: Summary data are from the Health Resources & Services Administration's data.HRSA.gov dashboard for January 2022 through June 2024. The third grant program did not provide services or training and instead provided support to the 44 grantees. As such, the third grant program is not included in this table.

[a]While the Data Dashboard data are presented by academic year (e.g., July 2021 through June 2022), the July 2021 through June 2022 data for this Health Resources & Services Administration grant program started in January 2022, which was the beginning of the grant's performance period.

[b]The profession options provided by Health Resources & Services Administration included behavioral health, dentistry, medicine, nursing, public health, and student, and other. The "other" profession category included nutrition, pharmacy, and physical therapy, among others.

[c]Our analysis does not include data reported in the final 6 months of the grant program (July 2024 through December 2024), as data for that time period were not available at the time of our review.

Measuring effects of funded activities. HHS required the 44 grantees to measure the effects of their interventions at their organizations, such as retention rates. In addition, some grantees measured educational outcomes of trainings, use of resources and mental health services, work and learning environment changes, and worker and trainee outcomes, according to a TAC analysis.[14] Some grantees also planned to assess organization-level outcomes (e.g., absenteeism, work productivity, cost savings).

Strengthening organizational support for well-being. Twenty-four grantees conducted activities to strengthen organizational support for well-being, such as reviewing policies for their organizations to determine if they might negatively affect staff well-being, according to a TAC analysis.[15] One grantee we interviewed told us they developed a "Code Lavender" program in their hospital. This program initiated a series of actions the hospital was to take in response to a traumatic event, such as proactively providing support to affected health workers.

How did HHS oversee grant programs addressing mental health among health professionals?

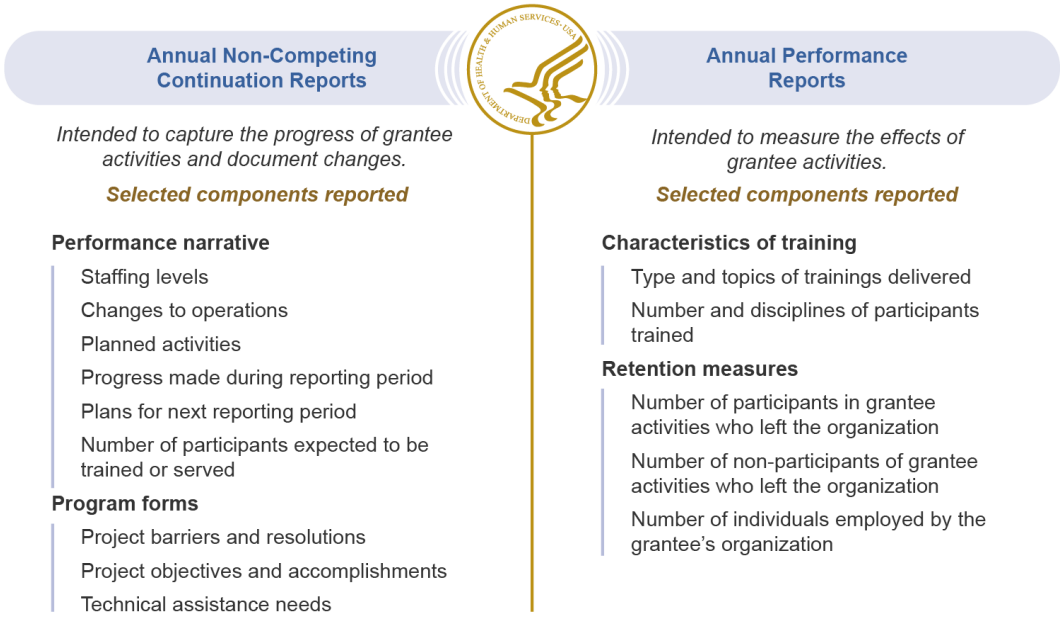
HHS reviewed annual reports submitted by grantees, conducted regular meetings with grantees, and oversaw an external evaluation of the grants, among other activities, to oversee the grant programs over the 3-year period of January 2022 through December 2024. These activities were designed to oversee the progress and performance of grantees in meeting their goals and objectives.

Reviewed annual grantee reports

One of HHS's primary mechanisms for overseeing grant programs was reviewing annual reports submitted by grantees for the three grant programs during calendar years 2022 through 2024. According to HHS officials, the purpose of monitoring the data contained in the annual reports was to: 1) ensure grantees were compliant with grant and statutory requirements, 2) enhance overall program performance, 3) respond to any inquiries about program progress, and 4) ensure individual grantees were meeting their individual goals and objectives. (See fig. 4 for more information on components reported in annual grantee reports).

- **Annual non-competing continuation reports.** These reports included qualitative information to assess the progress of grants.[16] For example, grantees provided information on each project's current staffing, changes to operations, planned activities and progress during the remaining period, and plans for the next year of the award, including expected participants to be served or trained. These reports also included quantitative information, such as the number of participants expected to be trained.
- **Annual performance reports.** These reports included data to enable HHS to measure the effects of grantee programs, according to HHS officials.[17] For example, HHS required grantees to report on the number of individuals employed by the grantee's organization and the number of individuals who participated in training. Grantees were also required to report retention data by those who participated and those who did not participate in grantee activities.

Figure 4: Selected Components Grantees Reported to the Department of Health and Human Services, 2022 through 2024



Source: GAO analysis of Department of Health and Human Services (HHS) documents, handbooks, and manuals for performance reporting requirements for grants addressing health professional mental health; HHS (seal). | GAO-26-107951

Note: HHS required grantees of all three grant programs to submit annual non-competing continuation reports and the 44 grantees of the two grant programs supporting providers and students to submit annual performance reports. HHS did not require the Technical Assistance Center grantee to submit annual performance reports, because this grantee did not support individual providers and students.

Held regular meetings with grantees

HHS officials said grant program officers met one-on-one with grantees on a bi-monthly or quarterly basis to receive updates and answer questions over the 3-year grant period. According to HHS officials, HHS provided grantees with a communications template to facilitate these meetings, which included discussion topics such as a review of grant progress and challenges. Three grantees we interviewed and representatives from the TAC grantee said they had regular meetings with the HHS program officers to discuss progress, successes, and challenges of their respective grants.

Contracted an external evaluator

HHS also began an external evaluation of these grant programs in 2022 to measure program outcomes. The agency contracted with an external evaluator that analyzed preliminary performance and cost data reported to HHS, collected additional survey and interview data, and submitted the most recent interim evaluation report in January 2025. The contract was scheduled to run through September 2026—1 year after the grant period for the three grant programs—but HHS terminated the contract in May 2025 due to funding changes.[18] HHS officials said they plan to review the data collected by the contractor alongside final reports submitted by grantees in spring 2026 to inform potential future grant programs.

What challenges did grantees report in implementing HHS grant programs?

Grantees reported challenges in implementing the three HHS grant programs related to resources, their organizations' commitment to their workers' well-being, stigma, and reporting requirements, according to a 2024 interim analysis conducted by the TAC grantee and our interviews with six selected grantees.[19]

Resources. According to the TAC's interim analysis, grantees commonly

reported that resource constraints, including challenges with staffing the program team and lack of time for health professionals to participate, made it more difficult to implement activities. For example, two grantees we interviewed told us participants had difficulty finding time to commit to activities as they were busy and working long hours.

Organizational commitment to health professionals' well-being. Grantees commonly reported that their organizational policies and leadership sometimes did not fully support health worker well-being, which could result in grant activities being prioritized lower than other organizational policies, according to the TAC's interim analysis. For example, one grantee reported contradictory messages from their organization's management about both caring about staff work-life balance and time to recharge versus decreases in pay if staff see fewer patients.

Stigma. Grantees commonly reported that the stigma health professionals can experience when participating in activities to support their mental health was a challenge, according to the TAC's interim analysis. Some grantees tailored their program content to address and respond to this. For example, one grantee reported an increase in participation of grantee activities by avoiding the term "therapy" and instead using terms like "team bonding" and "team communication."

Reporting requirements. The six selected grantees we interviewed said grantees were required to report the same performance information both to HHS and the HHS-contracted external evaluator for these grant programs. One grantee noted that reporting the same information twice was redundant, not an effective use of time, and this process of collecting measures multiple times caused confusion for participants.

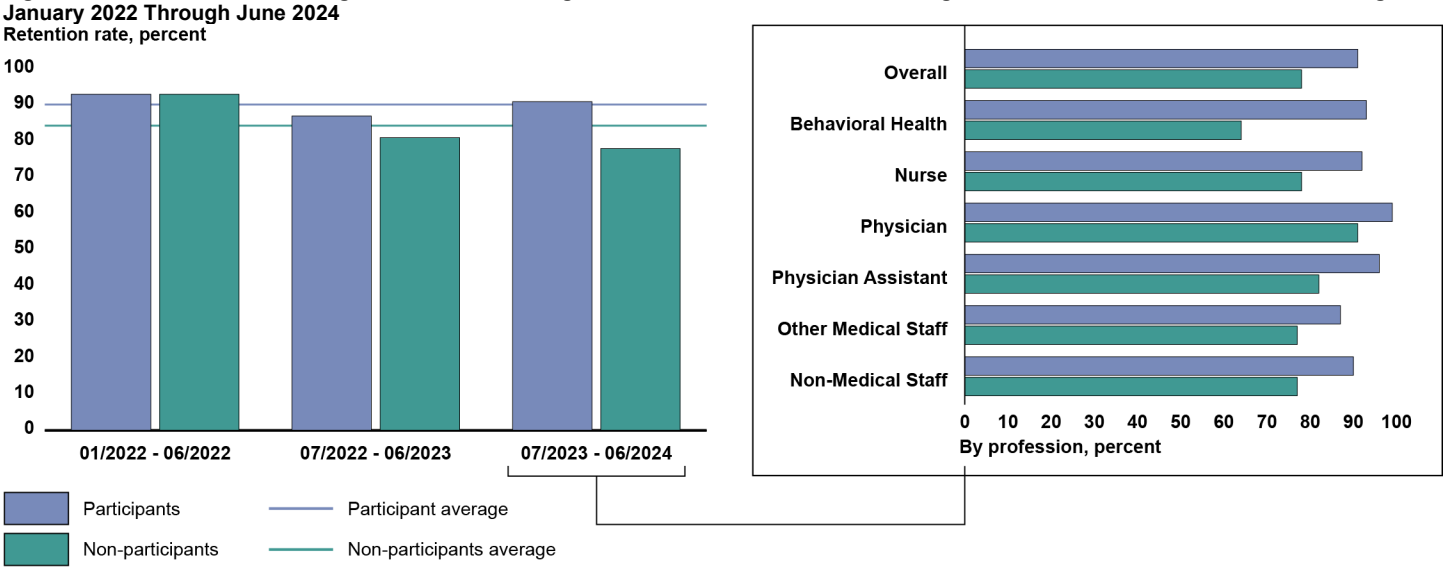
HHS officials told us they informed the external evaluator of grantee performance data the department was already collecting and encouraged the evaluator to use available data and avoid requesting duplicate data from grantees. Officials from the external evaluator said they worked with HHS to develop a data collection strategy that would use data that was already available. In our review of documents with the performance data required by HHS and the external evaluator, we found the external evaluator generally asked grantees to confirm the accuracy of the performance measures already submitted to HHS. However, the external evaluator's data collection tool required grantees to report this information in a different format and across a different reporting period. As noted, this was seen by some grantees as a duplicate request and caused confusion for some grantees. As described above, HHS terminated the external evaluator's contract in May 2025, ending its evaluation activities.

What benefits did HHS grantees report from their grant program activities?

The 44 grantees of the two grant programs supporting providers and students reported a variety of benefits from grant program activities, such as higher retention of participants in their positions, according to data reported by grantees and two interim TAC analyses.

Participants of the grant program supporting providers remained in their organizations in July 2022 through June 2023 and July 2023 through June 2024 at higher rates than non-participants, according to our analysis of data reported by grantees.[20] In contrast, retention rates were similar between participants and non-participants in January 2022 through June 2022, the first 6 months of the grant program. The external evaluator told us they found similar higher rates of retention of participants as compared to non-participants of this grant program in their analysis of retention data for July 2022 through June 2023. See figure 5 for more information on retention rates, including rates by profession.

Figure 5. Retention in Grantee Organizations, Promoting Resilience and Mental Health Among Health Professional Workforce Grant Program, January 2022 Through June 2024



Source: GAO analysis of Promoting Resilience and Mental Health Among Health Professional Workforce grantee reported Annual Performance Report data. | GAO-26-107951

Note: This figure presents grantee data reported from the beginning of the grant program in January 2022 through June 2024. Department of Health and Human Services collected these retention data for the listed profession categories. Our analysis does not include data reported in the final six months of the grant program from July through December 2024, as data for that time period was not available at the time of our review.

Additionally, two interim TAC analyses, issued in 2024 and 2025, identified other benefits reported by grantees from the two grant programs supporting providers and students.[21] Examples included the following.

- Five grantees that chose to provide data to the TAC grantee reported between seven and 37 percent lower rates of burnout following the start of the grant program. In addition, one grantee that chose to provide data to the TAC grantee reported a 53 percent lower rate of anxiety and a 50 percent lower rate of depression.
- Grantees commonly reported that their organizations increased the number of mental health services and supports for health professionals as a result of their grant programs; and grantees commonly reported improved organizational workflows and a positive culture change reducing the stigma around mental health conditions.

Agency Comments

We provided a draft of this report to the Department of Health and Human Services for comment. The Department provided technical comments, which we incorporated as appropriate.

How GAO Did This Study

To describe what literature reports about the prevalence and severity of mental health conditions, including substance use disorders, among health professionals in the U.S., we conducted a literature review to identify relevant studies published in peer-reviewed journals from January 2020 through February 2025. We selected this time period to capture the most recent information available at the time of our review. We identified 50 relevant studies. (See appendix I.)

We interviewed representatives from four national health care professional organizations—American Academy of Family Physicians, American Society of Addiction Medicine, The American Nurses Association, and The Dr. Lorna Breen Heroes Foundation and ALL IN: Wellbeing First for Healthcare Coalition—about their perspectives on the prevalence and severity of mental health conditions among professionals as well as risk factors that may contribute to these

conditions. We selected health professional organizations that conduct research on and take actions related to addressing mental health conditions among health professionals. The views of these representatives of stakeholder organizations are not generalizable to all health professionals but rather provide illustrative examples of experiences of particular groups of health professionals.

We also reviewed information from HHS and other agency documents to identify any risk factors affecting mental health conditions among health professionals. We synthesized the information from our literature review, interviews with representatives of stakeholder organizations, and document reviews to describe the prevalence and severity of mental health conditions among health professionals.

We included three HHS-identified federal grant programs in our review that were ongoing at the time we began our work in November 2024, and that specifically focused on addressing mental health conditions and substance use disorders among health professionals. We did not include in our review grant programs for mental health and substance use disorder efforts more broadly, such as the State Opioid Response Grants, although some grant funding from those grants may have been allowable to use to support health professionals.

To obtain information on the three HHS-identified grant programs, we reviewed information from federal sources, all 45 grantees across the three grant programs, and the four stakeholder organizations. We collected information from HHS about three grant programs, including information on the characteristics of these grant programs, such as activities performed by grantees, HHS oversight of grantee activities, and any grantee-reported challenges and benefits. We also reviewed grant award data from the HHS Tracking Accountability in Government Grants System, which is a database of grants awarded by the twelve Operating Divisions of HHS.

We also collected and reviewed data from the HHS Data Dashboard on Health Professions Training Programs—a system that displays aggregated performance data for Health Resources and Services Administration-awarded health professions training grants. Grantees of the two grant programs supporting providers and students reported training activities for January 2022 through June 2024, the most recent period available on the Data Dashboard.

To assess the reliability of the HHS award data and grantee-reported performance data, we reviewed documentation describing the data and interviewed HHS officials about data collection processes. We determined that the data were sufficiently reliable for the purposes of reporting on the characteristics of three grant programs; HHS's oversight of these grant programs; and the effects of the grant programs.

We also reviewed HHS documentation related to the three HHS-identified grants, such as notices of funding opportunities posted in July and August 2021, and HHS's oversight of these grants, such as performance measure manuals and guidance. Additionally, we reviewed and analyzed annual performance reports and annual non-competing continuation reports from January 2022 through June 2024, for completeness and reported benefits. We also reviewed three HHS-funded technical assistance grantee's interim analyses on grantee-reported activities, challenges, and benefits.[22]

We interviewed officials from HHS involved with administering the three grant awards and six selected grantees on topics regarding grant activities, HHS oversight, and reported benefits of these programs. We selected the grantees based on criteria including variation in business type (e.g., academic institution, health provider organization, research organization), organization type (e.g.,

public, non-profit, private), and geographic location. The views of these grantees are not generalizable to all 45 grantee participants.

We conducted this performance audit from November 2024 to March 2026 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 objectives.

List of Addressees

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The Honorable Bernard Sanders
Ranking Member
Committee on Health, Education, Labor, and Pensions
United States Senate

The Honorable Brett Guthrie
Chairman
The Honorable Frank Pallone, Jr.
Ranking Member
Committee on Energy and Commerce
House of Representatives

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

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Appendix I: Literature Review Scope and Methodology

To describe what the literature reports about the prevalence and severity of mental health and substance use disorder among health professionals, we conducted a literature review to identify relevant studies published in peer-reviewed journals from January 2020 to February 2025. We chose this time frame to reflect the most recent information available at the time of our review.

We searched for research published in relevant peer-reviewed journals in the Coronavirus Research Database, Health & Medical Collection, PTSDpubs, Publicly Available Content Database, Research Library, SciTech Premium Collection, and Sociology Collection, among others, in ProQuest; AgeLine, APA PsycArticles, CINAHL with Full Text, E-Journals, and MEDLINE in EBSCOhost; all Healthcare Collection databases with the exception of MEDLINE in ProQuest Dialog; and Scopus. A research librarian constructed search strings to return studies that focused on health professionals and burnout, substance use disorders, common mental illnesses, mental health and mental illness generally, or resilience. The librarian reviewed the results of these searches and identified the subset that dealt specifically with prevalence or severity of mental health or substance use disorders among health professionals in the U.S. After excluding duplicates, we identified and reviewed 156 abstracts that included systematic reviews and meta-analyses, and single studies when systematic reviews or meta-analyses were not available on a given search topic.

Of the 156 abstracts, we found 55 abstracts to be relevant. For these, we obtained and reviewed the full study and identified that these articles met the following criteria: (1) had numerical data on the prevalence and severity of mental health and substance use disorders among health professionals, (2) referenced mental health conditions and expressions of mental health through descriptions of clinical diagnosed disorders and information on resilience and mental wellness, (3) included health professionals generally or specific to clinical or non-clinical roles across health disciplines and, for single study searches, for burnout limited to emergency medicine, OBGYN and oncology, (4) examined health professionals in the U.S., (5) were published in a peer-reviewed journal, and (6) were published from January 2020 to February 2025.

We also assessed the research methodology of these articles to determine whether each article was appropriate to include in our literature review. Two technical reviewers assessed each study, including the study's research design, and strengths and limitations. We also assessed the extent to which each study's findings were generalizable to the health professional population in the U.S. We determined that 50 of the 55 articles were relevant for inclusion based on their research methodology. See below for a complete list of the 50 relevant studies we reviewed categorized by our assessment of generalizability.

Our report presents findings from the body of knowledge included in these articles. We primarily drew from generalizable articles to the overall health professional population or specific professions (e.g., nurses) in the U.S. and used non-generalizable articles for those mental health topics for which we did not identify generalizable studies of support. Of the 11 generalizable articles, four were generalizable to the entire health professional workforce and seven were generalizable to specific health professions (e.g., nursing). All studies have limitations and to varying extents make assumptions about health professional mental health. Despite these limitations, we determined that the studies we included provide reliable information about the prevalence of mental health among health professionals.

Generalizable studies GAO reviewed

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Endnotes

[1]The prevalence of mental health conditions among health professionals varied across the literature we reviewed. Of the 50 studies we reviewed, four were generalizable to the entire health professional workforce and seven were generalizable to specific health professions (e.g., nursing profession).

[2]This study defined health workers as a wide variety of occupations including direct health care workers and support roles among other roles. Researchers assessed depression and anxiety using the four-question Patient Health Questionnaire. See Jeannie A.S. Nigam, Michael Barker, Thomas R. Cunningham, et al., "Vital Signs: Health Worker-Perceived Working Conditions and Symptoms of Poor Mental Health—Quality of Worklife Survey, United States, 2018–2022,” *Morbidity and Mortality Weekly Report*, vol. 72, no. 44 (2023): 1197–1205.

[3]This study surveyed actively licensed nursing professionals from November 2020 through March 2021. The authors acknowledged the findings may not be generalizable to all nursing professionals. Researchers assessed substance use problems and disorders using nine questions adapted from the Drug Abuse Screening Test and from the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders. See Alison M. Trinkoff, Victoria L. Selby, Kihye Han, et al., “The Prevalence of Substance Use and Substance Use Problems in Registered Nurses: Estimates from the Nurse Worklife and Wellness Study,” *Journal of Nursing Regulation,* vol. 12, no. 4 (2022): 1-12.

[4]Data were from the National Violent Death Reporting System, which includes data on suicide and homicide among other causes of death. Researchers identified registered nurses from the occupation listed on the decedents’ death certificates. See Judy E. Davidson, Hirsh Makhija, Kelly C. Lee, et al., “National Incidence of Nurse Suicide and Associated Features,” *The Journal of Nursing Administration*, vol. 54, no.12 (2024): 649–656.

[5]This study assessed burnout with a single self-reported item about feeling “used up.” Nigam et al., "Vital Signs: Health Worker–Perceived Working Conditions and Symptoms of Poor Mental Health,” 1197-1205.

[6]The Medscape surveys reported percentages of respondents who felt burned out (the prevalence we cite), depressed, both burned out and depressed, or neither of these. See Jon McKenna, “'If Boundaries Are Set, It Is Possible': Medscape Physician Mental Health & Well-Being Report 2025,” *Medscape*, (Jan. 2025); Jennifer Nelson, “Finding Renewed Resilience: Physician Assistant Burnout & Depression Report 2024,” *Medscape*, (Oct. 2024); and Jennifer Nelson, “A Silent Struggle: Medscape Nurse Practitioner Burnout & Depression Report 2024,” *Medscape,* (Aug. 2024).

[7]Nigam et al., "Vital Signs: Health Worker-Perceived Working Conditions and Symptoms of Poor Mental Health,” 1197-1205.

[8]Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, *Impact Wellbeing™ Guide: Taking action to improve healthcare worker wellbeing*, Publication 2024-109 (Washington, D.C.: revised July 2024).

[9]All In WellBeing First for Healthcare Dr. Lorna Breen Heroes’ Foundation, *Remove Intrusive Mental Health Questions from Licensure and Credentialing Applications: A Toolkit to Audit, Change, and Communicate,* (2022).

[10]We reviewed federal grant databases and program inventories and confirmed that these three grant programs represented the totality of grant programs targeting health professional mental health at the time we began our work in November 2024.

[11]The American Rescue Plan Act of 2021 appropriated funding for grants to health professionals and other organizations to promote mental health and reduce substance abuse among health professionals. Pub. L. No. 117-2, §§ 2703 - 2705, 135 Stat. 4, 46. Additionally, the Dr. Lorna Breen Health Care Provider Protection Act authorized grants to health care entities and health professions' schools to address mental health conditions and substance use disorder among health professionals. Pub. L. No. 117-105, § 3, 136 Stat. 1118, 1120 (2022). However, only the American Rescue Plan Act of 2021 appropriated funding for such grants during fiscal years 2022 through 2024.

[12]Forty-four grantees from two of the grant programs provided direct services to health professionals. The grantee from the third grant program provided support to the 44 grantees. The interim analyses described in this report should not be interpreted as conclusive, as some HRSA grantees are still reporting on their activities and outcomes.

[13]Officials from the TAC grantee said information contained in this TAC grantee analysis was based on survey, interview, and focus group data and grantee publications on the impact of grantee activities in 2022 and 2023 from the grantees of the two grant programs supporting provider and students. See Workplace Change Collaborative, *Impacts of the HRSA Health Workforce Well-Being Program,* (Washington, D.C.: Fitzhugh Mullan Institute for Health Workforce Equity, 2025).

[14]For the Technical Assistance Center's analysis of grantee activities, see Candice Chen, Julia Strasser, Randl Dent, et al., "How Can Health Care Organizations Address Burnout? A Description of the Dr. Lorna Breen Act Grantee*s," American Journal of Public Health*, vol. 114, no. s2 (2024): S148-S151.

[15]Candice Chen, et al., "How Can Health Care Organizations Address Burnout? A Description of the Dr. Lorna Breen Act Grantee*s."*

[16]HHS required grantees to complete narrative reports annually. We found all 45 grantees submitted non-compete continuation reports to HHS for years 1 and 2 of the award period (calendar years 2022 and 2023). HHS also required final reports, which is to comprise a final narrative and a federal financial report to be submitted by grantees in 2025, or, if they received a no-cost extension, in 2026 according to HHS officials.

[17]HHS required the 44 grantees of the two grant programs supporting providers and students to complete annual performance reports from January 2022 through 2024. We found that the 44 grantees submitted over 99 percent of performance data they were required to report from January 2022 through June 2024. HHS did not require the Technical Assistance Center grantee to submit these reports, because it did not support individual providers and students.

[18]According to HHS officials, the agency terminated the evaluation contract in accordance with Section 3 of Executive Order 14222: Implementing the President's "Department of Government Efficiency" Cost Efficiency Initiative to reduce overall federal spending. We did not assess HHS's decision to terminate this contract in this review.

[19]This TAC grantee analysis was limited to qualitative reports from surveys and follow-up interviews with 36 out of the 44 grantees. Data collection occurred 18 months into the 3-year grant period (2022 to 2024). See Randl Dent, Julia Strasser, Lauren Muñoz, et al., "Lessons Learned from the Health Resources and Services Administration Health Workforce Well-Being Grantees," *Families, Systems, & Health*, vol. 42, no. 3 (2024): 317-332.

[20]Grantees reported data each academic year to HHS as part of the Annual Performance Report. Since participation in grantee activities is voluntary and non-randomized, analysis of the grantee reported Annual Performance Report data does not reflect confounding factors that might affect retention.

[21]These TAC interim analyses were limited to surveys and qualitative reports that provided snapshots in time reported by grantees from 2022 through 2024. The interim analyses described in this report should not be interpreted as conclusive, as it was optional for grantees to report information to TAC and some grantees are still reporting on their activities and outcomes. Workplace Change Collaborative, *Impacts of the HRSA Health Workforce Well-Being Program* and Randl Dent, et al., "Lessons Learned from the Health Resources and Services Administration Health Workforce Well-Being Grantees."

[22]Candice Chen, et al., “How Can Health Care Organizations Address Burnout? A Description of the Dr. Lorna Breen Act Grantees,” (2024); Workplace Change Collaborative, *Impacts of the HRSA Health Workforce Well-Being Program,* (2025); and Randl Dent, et al., “Lessons Learned from the Health Resources and Services Administration Health Workforce Well-Being Grantees,” (2024).