



**U.S. Department of Health and Human Services
Health Resources and Services Administration**

REPORT TO CONGRESS

NURSING WORKFORCE

Fiscal Year 2021

Executive Summary

This report is being provided to Congress as outlined in section 806(i) of the Public Health Service Act, which states, in part:

Not later than September 30, 2020, and biennially thereafter, the Secretary shall submit to the Committee on Health, Education, Labor, and Pensions of the Senate and the Committee on Energy and Commerce of the House of Representatives, a report that contains an assessment of the programs and activities of the Department of Health and Human Services related to enhancing the nursing workforce, including the extent to which programs and activities under this title meet the identified goals and performance measures developed for the respective programs and activities, and the extent to which the Department coordinates with other Federal departments regarding programs designed to improve the nursing workforce.

This report describes the Health Resources and Services Administration's Nursing Workforce Programs, including the Nurse Corps Loan Repayment and Scholarship Programs. The report provides information regarding the efforts the agency has taken to reach out to federal departments to improve these programs and the nursing workforce. The report also provides performance data to show program impact.

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Acronym List

ANE	Advanced Nursing Education
ANE-NPR	ANE-Nurse Practitioner Residency
ANE-NPRIP	ANE-Nurse Practitioner Residency Integration Program
ANE-SANE	ANE-Sexual Assault Nurse Examiners
ANEW	Advanced Nursing Education Workforce
APRN	Advanced Practice Registered Nurse
AY	Academic Year
BHW	Bureau of Health Workforce
COVID-19	Coronavirus Disease 2019
CRNA	Certified Registered Nurse Anesthetist
CSF	Critical Shortage Facility
FQHC	Federally Qualified Health Center
FY	Fiscal Year
GPRA	Government Performance and Results Act
HHS	U.S. Department of Health and Human Services
HPSA	Health Professional Shortage Areas
HRSA	Health Resources and Services Administration
IAFN	International Association of Forensic Nurses
LRP	Loan Repayment Program
MAT	Medication-Assisted Treatment
NAT	Nurse Anesthetist Traineeship
NCHWA	National Center for Health Workforce Analysis
NEPQR	Nurse Education, Practice, Quality and Retention
NEPQR-IPCP: BHI	NEPQR-Interprofessional Collaborative Practice: Behavioral Health Integration
NEPQR-RNPC	NEPQR-Registered Nurses in Primary Care
NEPQR-SET	NEPQR-Simulation Education and Training
NEPQR-VNCP	NEPQR-Veteran Nurses in Primary Care
NFLP	Nurse Faculty Loan Program
NP	Nurse Practitioner
NWD	Nursing Workforce Diversity
NWD – E2	Nursing Workforce Diversity – Eldercare Enhancement
PHS Act	Public Health Service Act
RN	Registered Nurse

SP
VA

Scholarship Program
Department of Veterans Affairs

I. Legislative Language

This report is being provided to Congress as required by section 806(i) of the Public Health Service (PHS) Act, which states:

Not later than September 30, 2020, and biennially thereafter, the Secretary shall submit to the Committee on Health, Education, Labor, and Pensions of the Senate and the Committee on Energy and Commerce of the House of Representatives, a report that contains an assessment of the programs and activities of the Department of Health and Human Services related to enhancing the nursing workforce, including the extent to which programs and activities under this title meet the identified goals and performance measures developed for the respective programs and activities, and the extent to which the Department coordinates with other Federal departments regarding programs designed to improve the nursing workforce.

II. Introduction

Nursing is the largest health profession in the United States with more than 3.8 million registered nurses (RNs) nationwide.¹ However, despite this number, the Health Resources and Services Administration's (HRSA) National Center for Health Workforce Analysis (NCHWA) projects the maldistribution of nurses to be a continuing issue for the profession. While HRSA's NCHWA projects the overall national supply of nurses will outpace demand by the year 2030, they project imbalances of RNs at the state and local community levels and expect nursing shortages to exist at a subnational level in several areas across the country. Many of HRSA's nursing workforce programs seek to address this by focusing on rural and underserved populations.²

Diversity within the nursing profession is also important for improving our nation's health. Studies have shown that having a diverse nursing workforce is essential for progress towards achieving health equity in the United States.³ Data from HRSA's Area Health Resources Files show that approximately 19 percent of RNs (excluding Advanced Practice Registered Nurses (APRNs)) were from an underrepresented minority group.^{4,5} These findings suggest that the

¹ "Nursing Fact Sheet," American Association of Colleges of Nursing: The Voice of Academic Nursing. Accessed June 25, 2020. <https://www.aacnnursing.org/News-Information/Fact-Sheets/Nursing-Fact-Sheet>.

² A medically underserved community is defined as a geographic location or population of individuals eligible for designation by the federal government as a Health Professional Shortage Area, Medically Underserved Area, Medically Underserved Population, or Governor's Certified Shortage Area for Rural Health Clinic purposes. As an umbrella term, this also includes populations such as homeless individuals, migrant or seasonal workers, and residents of public housing.

³ National Advisory Council for Nurse Education and Practice. Achieving Health Equity through Nursing Workforce Diversity. <https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/nursing/reports/2013-eleventhreport.pdf>.

⁴ Area Health Resources Files (AHRF) Dashboard. Health Resources and Services Administration. Accessed August 17, 2022. <https://data.hrsa.gov/topics/health-workforce/ahrf>.

⁵ HRSA defines underrepresented minority as someone from a racial or ethnic group that is considered inadequately represented in a specific profession relative to the representation of that racial or ethnic group in the general population.

diversity of the nursing workforce does not adequately represent the diversity of the communities it serves.⁶

HRSA's Bureau of Health Workforce (BHW) administers the nursing workforce programs authorized by Title VIII of the PHS Act and is committed to increasing the number of nurses working in rural and underserved communities and increasing diversity in health professions education and training programs and in the health workforce. This commitment extends to ensuring that the United States has the right clinicians, with the right skills, working where they are needed most.

III. HRSA Nursing Workforce Programs

The following describes the nursing workforce programs authorized by Title VIII of the PHS Act and includes information on their purpose and the activities they conduct. In Fiscal Year (FY) 2021, the nursing workforce programs received a total of \$263.7 million in annual appropriations and an additional \$200 million Coronavirus Disease 2019 (COVID-19) supplemental appropriation for Nurse Corps programs.

Advanced Nursing Education

HRSA's Advanced Nursing Education (ANE) programs include training support for APRNs, nurse faculty, and sexual assault nurse examiners (SANEs); residency programs for practicing APRNs are also included. These programs transform the workforce by supporting several activities, including traineeships; faculty and preceptor development activities; and longitudinal clinical immersion, with the aim of increasing the size of the advanced nursing workforce to provide quality care in rural and underserved community-based settings. These programs provided a funding preference as authorized by Section 805 of the PHS Act (42 U.S.C. § 296d) when a qualified applicant demonstrated that they substantially benefit rural or underserved populations, or help meet public health nursing needs in state or local health departments (such as Federally Qualified Health Centers (FQHCs)). Developing APRNs is especially important because HRSA's NCHWA projects the demand for primary care physicians will increase to 239,460 full-time equivalents by the year 2025, resulting in a supply shortage of 23,640 primary care physicians.⁷ APRNs can take on expanded roles to help meet this need for primary care services. Research suggests that training tomorrow's nursing workforce in rural and other community-based settings is more likely to produce providers who will ultimately serve these high-need areas during their careers.⁸ In FY 2021,

For the purposes of the health professions, HRSA considers people from these racial and ethnic backgrounds underrepresented: American Indian or Alaska Native, Black or African American, Native Hawaiian or Other Pacific Islander, and Hispanic (all races). Data are from the 2015-2019 American Community Survey.

⁶ "Fact Sheet: Enhancing Diversity in the Nursing Workforce." American Association of Colleges of Nursing: The Voice of Academic Nursing. Accessed April 8, 2022. <https://www.aacnnursing.org/news-information/fact-sheets/enhancing-diversity>.

⁷ U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. 2016. National and Regional Projections of Supply and Demand for Primary Care Practitioners: 2013-2025. Rockville, Maryland.

⁸ Collins C., Challenges of Recruitment and Retention in Rural Areas. *N C Med J.* 2016 Mar-Apr; 77(2): 99-101.

ANE programs received \$80.6 million in annual appropriations. Table 1 below provides a summary of FY 2021 awards for the ANE programs.

Table 1: Advanced Nursing Education Award Information (FY 2021)

Program Name	Number of Awards	Award Amount
Advanced Nursing Education Workforce Program	57	\$36,828,909
Nurse Anesthetist Traineeship Program	81	\$2,239,366
Advanced Nursing Education - Sexual Assault Nurse Examiners Program	20	\$9,475,431
Advanced Nursing Education - Nurse Practitioner Residency Program	36	\$22,274,755
Advanced Nursing Education - Nurse Practitioner Residency Integration Program	10	\$4,800,000
FY 2021 Total	204	\$75,618,461

Advanced Nursing Education Workforce Program

Program Purpose and Grant Information

The Advanced Nursing Education Workforce (ANEW) program supports innovative academic-practice partnerships to prepare primary care APRN students through academic and clinical training with a focus on rural and underserved populations. The partnerships support traineeships as well as academic-practice program infrastructure for schools of nursing and their practice partners to deliver longitudinal primary care clinical training experiences with rural and/or underserved populations for selected advanced practice nurse practitioner (NP), clinical nurse specialist, and nurse-midwifery students in primary care programs. The partnerships also help link program graduates to the HRSA Health Workforce Connector, which helps connect eligible professionals to communities in need and other existing support resources so they can find employment in rural and underserved community-based settings.

Program Activities

The goal of the ANEW program is to increase the number of APRNs by providing traineeship and infrastructure funds to institutions who are prepared to meet the primary care needs of rural and underserved communities. ANEW award recipients accomplish this goal by providing support to APRN students and preparing graduates to practice in these communities. ANEW award recipients also enhance curricula; increase academic-practice partnerships; recruit, support, and train APRN preceptors; develop APRN faculty; provide longitudinal, immersive, community-based clinical training experiences for students; and connect program graduates with primary care employment

resources post-graduation in rural and/or underserved communities. For example, an ANEW award recipient partnership used their mobile clinic to provide relief for communities in dire need of COVID-19 testing, treatment, and referral, in addition to providing medical and behavioral health care services via telehealth. Through this mobile unit partnership under the 100 Communities program in Texas, several rural and medically underserved populations in northeast Texas are receiving care. Another award recipient in Greensboro, North Carolina, developed a free comprehensive multi-media package that integrates the Adult-Gerontology Primary Care Nurse Practitioner Competencies and incorporates evidence-based guidelines in the development of the clinical cases to enhance nurse practitioner education. HRSA awardees designed these resources to enhance novice student learning and nurse practitioners' continuing education.

Nurse Anesthetist Traineeship Program

Program Purpose and Grant Information

The Nurse Anesthetist Traineeship (NAT) program supports eligible entities to meet the cost of traineeships for individuals (full-time only) in nurse anesthesia degree programs, lessening the financial barrier to program completion and increasing the number of certified registered nurse anesthetists (CRNAs) providing care, especially to rural and underserved populations. NAT students may use traineeship funds during the period of the traineeship for full or partial costs of tuition and fees, books/e-books, and reasonable living expenses (stipends). Through their holistic, interdisciplinary, and multi-modal approach, CRNAs play an integral role in appropriate use of opioids for patients receiving anesthesia, sedation, and pain management services for acute and chronic pain. CRNAs are the primary providers of anesthesia care in rural America and, in some instances, may be the sole provider of anesthesia services. Because the opioid crisis is most acute in rural America, CRNAs often serve on its frontlines. The aim of the program is to increase the number of CRNAs nationally who are well-prepared and well-positioned to practice independently and deliver evidence-based, high quality, and safe anesthesia and services related to the management and treatment of acute and chronic pain.

Program Activities

NAT award recipients support the U.S. Department of Health and Human Services' (HHS) and HRSA's priority to combat the opioid crisis, especially among rural and underserved populations. The recipients accomplish this by providing didactic and clinical teaching/training for students in opioid addiction management and treatment and options for non-opioid pain management and anesthesia. In the past 2 years, award recipients have implemented several innovative practices in response to the opioid epidemic, including the use of non-opioid anesthesia modalities, multi-modal analgesic therapy, and initiation of a residency program focusing on alternative intervention for pain management.

NAT trainees have also been working on the frontlines during the COVID-19 pandemic. In response to the COVID-19 pandemic, several NAT award recipients created innovative projects to allow trainees to participate in clinical practicum (e.g., simulated pre-anesthesia evaluation via telehealth). NAT trainees became experts in airway management for COVID-19 patients by providing care for these patients. Additionally, an NAT award recipient initiated a partnership with the Department of Veterans Affairs (VA) to collaborate on an interdisciplinary, team-based, didactic-clinical training. Lastly, an NAT award recipient held an outreach event, the Diversity in

Nurse Anesthesia Mentorship Program, to ensure recruitment of diverse students to serve medically underserved communities.

Advanced Nursing Education – Sexual Assault Nurse Examiners Program

Program Purpose and Grant Information

The Advanced Nursing Education – Sexual Assault Nurse Examiners (ANE-SANE) program increases the number of RNs, APRNs, and forensic nurses trained and certified as SANEs in communities on a local, regional, and/or state level. The purpose of the ANE-SANE program is to fund advanced nursing education to recruit, train, and certify nurses to practice as SANEs. The program aims to increase the supply and distribution of qualified working SANEs and expand access to sexual assault forensic examinations. By expanding access to SANEs, the ANE-SANE program aims to provide better physical and mental health care treatment for survivors of sexual assault and domestic violence leading to better evidence collection and potentially higher prosecution rates. ANE-SANE award recipients are required to form collaborative linkages (partnerships) to support training, participant recruitment, training access, practice experience opportunities, practice retention efforts, and to cultivate environments conducive to SANE training and practice throughout the period of performance. In FY 2021, HRSA implemented a new 3-year funding cycle for the ANE-SANE program, subsequent to the initial FY 2018 funding cycle.

Program Activities

ANE-SANE award recipients recruit participants, preceptors, and clinical sites through formal and informal partnerships as well as through online and in-person educational recruitment events offering continuing education credits. The ANE-SANE Program supports participants in virtual and in-person didactic training, and supports travel to establish clinical training experiences so that participants obtain all required didactic and clinical hours toward SANE certification through either state agencies or the International Association of Forensic Nurses (IAFN). Several programs have even become IAFN-approved clinical skills locations and provide clinical hours for additional nurses beyond those supported through the ANE-SANE grant. Award recipients offer week-/weekend-long skills “blitz” trainings that use simulation, standardized patients, and innovative technologies such as the Project ECHO tele-mentoring model. ANE-SANE award recipients hold bi-monthly collaboration meetings and work together to advance the field, with one outcome being a full edition of the *Journal of Forensic Nursing* dedicated to their projects, models, and outcomes.

ANE-SANE award recipients had significant accomplishments at the individual program level. An award recipient in Arizona developed a mobile application that provides a variety of resources to support SANEs in their crucial line of work, helps them to improve their overall health and well-being, and creates a sense of community among SANEs through interaction with the app and with others. The secondary trauma⁹ in the SANE profession leads to high levels of burnout and turnover, which, in turn, decreases supply and access, so this app is both

⁹ Secondary Trauma: Trauma resulting from SANEs’ continuous exposure to the trauma experienced by their patients (via physical examination and/or listening to a recounting of the trauma). The term is often used interchangeably with Vicarious Trauma, Secondary Traumatic Stress, and Compassion Fatigue.

relevant and useful. As part of the ANE-SANE grant, some recipients developed site-based models with SANE employees positioned at one or more clinical locations, while others have community-based models that provide coverage for larger geographic regions. Several award recipients created 24/7 SANE coverage of area hospital emergency departments. These programs ensure a SANE-trained nurse is available to provide sexual assault services as needed. Award recipients also use validated tools, such as Qualtrics software, to assess nurses for vicarious trauma and offer a mix of resilience and support interventions to combat burnout. Many recipients have developed and/or are participating in multidisciplinary Sexual Assault Response Teams with law enforcement, social services, community services, etc. ANE-SANE recipients are also working with hospitals and health systems to develop clinical policies that best support the provision of quality care and services for survivors of sexual assault.

In September 2021, HRSA hosted the first ANE-SANE Impact Symposium where the 20 award recipients shared best practices that were successful in increasing nurses' access to SANE training and certification. The presenters also shared strategies and resources that increased the supply and distribution of qualified SANEs and survivors' access to quality SANE services. The symposium consisted of three sessions showing how the ANE-SANE program addressed each of the three findings of the Government Accountability Office report on Availability of Forensic Examiners^{10,11} that spurred this program's funding: (1) limited availability of training; (2) weak stakeholder support for examiners; and (3) low examiner retention rates. Over 160 participants learned from the innovative models and activities employed by ANE-SANE recipients and their positive, national impact on SANE training and practice. In addition to award recipient presentations, partners from Futures without Violence, the Department of Justice, and HRSA's Office of Women's Health also presented on SANE and domestic violence work.

Advanced Nursing Education - Nurse Practitioner Residency Program

Program Purpose and Grant Information

The Advanced Nursing Education – Nurse Practitioner Residency (ANE-NPR) program prepares new NPs in primary care for practice in community-based settings through clinical- and academic-focused 12-month NP residency programs, with a preference for those projects that substantially benefit rural or underserved populations. All projects are required to establish academic-clinical partnerships, provide NP resident and preceptor interprofessional team-based training, designate project staff, participate in cohort collaboration, and provide post-residency employment assistance to connect program participants to primary care employment, especially in rural and/or underserved areas. The program has two tracks – one for recipients to develop a new NP residency program in the first year, and another for recipients to expand or enhance existing NP residency programs within the first 3 months of the ANE-NPR Program start date.

Program Activities

¹⁰ United States Government Accountability Office. Released December 12, 2018. SEXUAL ASSAULT: Information on the Availability of Forensic Examiners, GAO-19-259T. <https://www.gao.gov/assets/700/695914.pdf>

¹¹ United States Government Accountability Office. Released March 2016. SEXUAL ASSAULT: Information on Training, Funding, and the Availability of Forensic Examiners, GAO-16-334. <https://www.gao.gov/assets/gao-16-334.pdf>

ANE-NPR award recipients recruit participants, preceptors, and clinical sites through established academic-clinical partnerships. The ANE-NPR grant provides new NP graduates with interprofessional team-based, clinical, and didactic training experiences along the practice continuum in primary care community-based settings, such as rural health clinics, FQHCs, and mobile clinics. Since new graduate rural NPs can experience anxiety, increased stress, perceptions of isolation, and feelings of inadequacy and inundation, most ANE-NPR award recipients address these insecurities by enhancing NP skills and competencies focused on improving the health of rural and underserved populations. One ANE-NPR award recipient established the first rural health-focused NP residency program in Kansas, while another established the only regional NP residency program in Ohio. ANE-NPR projects focus on recruiting, training, developing, and supporting faculty and preceptors, and implementing employment assistance strategies to connect residency program completers to primary care employment, especially in rural and/or underserved areas.

Even though the ANE-NPR projects focus on primary care and ensure that training occurs in community-based settings, during training, participants are introduced and exposed to a myriad of specialty areas, such as behavioral health, women's health, pediatrics, endocrinology, etc. Additionally, ANE-NPR participants serve a variety of patient populations: migrant and seasonal farmworkers, homeless individuals, LGBTQ populations, pregnant women and infants, children, adolescents, older adults, veterans, refugees, people with disabilities, etc. A recipient in Chicago, Illinois offers medical Spanish language training to participants, while another in Seattle, Washington provides culturally- and linguistically-appropriate health and wellness services to its patient population, including the Asian/Pacific Islander community.

ANE-NPR participants receive training in COVID-19 care, value-based care, interprofessional communication, leadership, addiction management, population health, telehealth, health equity/social determinants of health, medication-assisted treatment (MAT) for substance use disorder/opioid use disorder, opioid use treatment, substance use treatment, etc. ANE-NPR participants conducted COVID-19 vaccine clinics and telehealth visits for patients and ANE-NPR award recipients provided wellness promotion and resiliency support services to participants through book clubs, reflective journaling exercises, mentorship programs, etc.

Advanced Nursing Education Nurse Practitioner - Residency Integration Program

Program Purpose and Grant Information

The Advanced Nursing Education Nurse Practitioner – Residency Integration Program (ANE-NPRIP) expands and/or enhances existing 12-month NP residency programs that are accredited or in the accreditation process in primary care or behavioral health and operate in an integrated, community-based setting. ANE-NPRIP projects conduct primary care or behavioral health NP residency programs in integrated community-based settings, through established academic-clinical partnerships. The ANE-NPRIP grant supports newly licensed and certified NPs to transition from education to practice by providing 12 continuous months of immersive clinical and didactic training at an integrated primary care or behavioral health community-based entity, with a focus on serving rural and/or underserved populations. ANE-NPRIP also encourages award recipients to assist primary care and behavioral health NP residency completers to remain in these settings.

Program Activities

ANE-NPRIP award recipients recruit and train participants in interprofessional, team-based care environments; provide participants with clinical and didactic training experiences along the practice continuum in integrated community-based settings; and provide post-residency employment support for program completers using the HRSA Health Workforce Connector and other resources. ANE-NPRIP award recipients address social determinants of health, health equity, and health disparities by providing opportunities for participants to serve high need, complex patient populations such as those experiencing homelessness, seasonal and migrant farmworkers, veterans, patients with limited English proficiency, those with low incomes, etc. ANE-NPRIP award recipients enhance their training curriculum to ensure that participants receive the training required to work in rural and/or underserved communities. The clinical curriculum has specialty rotations including pediatrics, orthopedics, behavioral health, pain management, endocrinology, dermatology, etc.

An award recipient in Peoria, Illinois developed an interprofessional community medicine rotation using their “Care-A-Van,” a mobile health center in the underserved urban area in downtown Peoria, as well as rural locations in the city of Streator. Another award recipient in Middletown, Connecticut, created and implemented a telehealth specialty rotation pilot to provide specialty rotations in remote settings for the NP residents and to expand access to specialty care. ANE-NPRIP award recipients focus on rural and/or underserved communities, and address HHS and HRSA priorities of workforce transformation, combatting the opioid epidemic, mental health, telehealth, value-based care, and maternal health. The projects include the development and enhancement of courses in opioid use treatment, substance use treatment, MAT, and COVID-19 care.

Nurse Faculty Loan Program

The Nurse Faculty Loan Program (NFLP) provides funding to accredited schools of nursing to offer loans to students enrolled in advanced education nursing degree programs who are committed to becoming nurse faculty. In FY 2021, NFLP received \$28.4 million in annual appropriations. Table 2 below provides a summary of FY 2021 NFLP awards.

Table 2: Nurse Faculty Loan Program Award Information (FY 2021)

Program Name	Number of Awards	Total
Nurse Faculty Loan Program	79	\$26,540,000

Program Purpose and Grant Information

The purpose of NFLP is to increase the number of qualified nursing faculty nationwide. NFLP seeks to accomplish this by providing funding to accredited schools of nursing to establish and operate a student loan fund and provide loans to students enrolled in advanced education nursing degree programs who are committed to becoming nurse faculty. The NFLP also aims to decrease the financial barrier of serving as nurse faculty and address HHS and HRSA priorities of increasing nurse faculty members in rural and underserved areas. In exchange for completion of up to 4 years of post-graduation full-time nurse faculty employment in an accredited school of nursing, the program authorizes cancellation of up to 85 percent of the original student loan amount (plus interest thereon). NFLP award recipients must provide an Institutional Capital Contribution that is equal to at least one-ninth of the Federal Capital Contribution award.

The NFLP recipients provide loan support to students for a maximum dollar amount of \$35,500 per academic year (AY). NFLP loans can be used to cover the costs of full or partial tuition, books, fees, and other reasonable educational expenses. Upon completion of each of the first, second, and third years of full-time employment as a faculty member at an accredited school of nursing, the school will cancel 20 percent of the original principal of and all accrued interest on the NFLP loan and 25 percent upon completion of the fourth year of full-time employment. The NFLP loan is repayable over a 10-year period beginning 9 months after the borrower completes the advanced nurse education program, ceases to be enrolled as a student in the advanced nurse education program, or ceases full-time employment as nurse faculty.

Program Activities

The NFLP supports institutions committed to preparing advanced degree nursing students to serve as nurse faculty, especially those with a focus on doctoral preparation, thereby addressing the national nursing faculty shortage. NFLP also addresses the nationwide primary care provider shortage by encouraging APRNs to serve as joint nurse faculty preceptors within an academic-practice partnership framework. NFLP student borrowers are required to obtain or maintain full-time employment within 12 months of graduation. The borrower's loan will be cancelled as described above for service as a full-time nurse faculty member at an accredited school of nursing, or part-time nurse faculty member at an accredited school of nursing in combination with another part-time faculty position or part-time clinical preceptor/educator position. Additionally, the borrower could seek nurse faculty designation in a joint nurse faculty appointment serving as full-time APRN preceptor for an accredited school of nursing, within an academic-practice partnership framework. To recruit nurse faculty students and provide nurse faculty employment opportunities, some NFLP award recipients engaged in collaborative partnerships with other NFLP award recipients, building valuable and longstanding academic and clinical partnerships. To prepare students to become qualified nurse faculty upon graduation, NFLP award recipients provide a variety of support and resources, such as mentorship, offering nurse educator courses, etc.

In Connecticut, one NFLP award recipient developed a consortium model among the state institutions to provide extensive training opportunities and comprehensive teaching practicum experiences for students. Some NFLP recipients use their graduates as APRN preceptors, while others prepare their students to be hired within the recipient's academic organization or partner organizations. In response to the COVID-19 pandemic, NFLP award recipients, in partnership with direct health care facilities, are now including clinical practicums as part of their core curriculum. This initiative has contributed to assisting frontline workers during the pandemic.

Nurse Education, Practice, Quality and Retention Programs

HRSA's Nurse Education, Practice, Quality and Retention (NEPQR) Programs address national nursing needs and strengthen the capacity for basic nurse education and practice under three priority areas: education, practice, and retention. NEPQR Programs support academic, service, and continuing education projects to enhance nursing education, improve the quality of patient care, increase nurse retention, and strengthen the nursing workforce.

Current NEPQR investments focus on preparing the current and future workforce in coordinated care delivery models, expanding nursing practice arrangements in non-institutional settings, improving access to primary health care, providing care for underserved populations and other high-risk groups such as persons with substance use disorders, and increasing the enrollment of veterans in Bachelor of Science in Nursing degree programs. As required by section 805 of the PHS Act, preference in funding is given to projects designed to substantially benefit rural or underserved populations or to help meet the public health nursing needs in state or local health departments. In FY 2021, NEPQR Programs received \$46.8 million in annual appropriations. Table 3 below provides a summary of FY 2021 awards for the NEPQR Programs.

Table 3: Nurse Education, Practice, Quality and Retention Award Information (FY 2021)

Program Name	Number of Awards	Award Amount
Interprofessional Collaborative Practice: Behavioral Health Integration Program	17	\$8,181,845
Veteran Nurses in Primary Care Training Program	7	\$3,211,577
Registered Nurses in Primary Care Training Program	42	\$27,170,599
Simulation Education Training Program	11	\$5,048,539
FY 2021 Total	77	\$43,612,560

Nurse Education, Practice, Quality and Retention - Interprofessional Collaborative Practice: Behavioral Health Integration Program

Program Purpose and Cooperative Agreement Information

The NEPQR-Interprofessional Collaborative Practice: Behavioral Health Integration (NEPQR-IPCP: BHI) program was designed to expand the practice of integrating behavioral health providers into nurse-led primary care teams to increase access to care, enhance care coordination, and improve patient outcomes in underserved community-based settings. The program strengthens nursing capacity to advance the health of patients, families, and communities, and provides quality coordinated care and other skills needed to practice in existing and emerging organized health systems.

Program Activities

NEPQR-IPCP: BHI recipients provide interprofessional, integrated care in nurse-led primary care teams in community-based settings. With the use of HRSA’s six-level framework for integration, each recipient provides an initial assessment on the current level of behavioral health integration, structural changes necessary to enhance current or new levels of integration, and ongoing assessments through the duration of the cooperative agreement. To increase the quality and access to integrated care, awardees provide interprofessional education and training for care team providers and clinical staff on behavioral health integration competencies, screening, and treatment of individuals with co-occurring physical and behavioral health needs. To demonstrate

methods to improve access to primary health care in medically underserved communities, awardees establish and/or expand nursing practice arrangements in non-institutional settings (e.g., community-based clinics such as Nurse-Managed Health Centers, school-based clinics, and FQHCs).

Nurse Education, Practice, Quality and Retention - Veteran Nurses in Primary Care Training Program

Program Purpose and Cooperative Agreement Information

The NEPQR-Veteran Nurses in Primary Care (NEPQR-VNPC) Training Program was designed to recruit and train military veteran nursing students to practice at the full scope of their license in community-based primary care teams. In addition, the program provides professional development opportunities and educational support for practicing RNs/preceptors aimed at developing primary care expertise and skillsets to provide high-quality care that addresses the unique needs of veterans.

The program aims to achieve a sustainable primary care nursing workforce equipped with the competencies necessary to deliver value-based primary care, improve the distribution of the nursing workforce, increase access to care, and improve population health outcomes by strengthening the capacity for basic nurse education and practice.

Program Activities

NEPQR-VNPC recipients recruit veterans who are interested in primary care to participate in 150 hours or more of primary care extended practicums in a community setting and provide wrap-around support services that will enable the veterans to progress through the RN curriculum and pass state licensing exams. Wrap-around services include the following: addressing veterans' financial concerns, unique needs, and stressors; building upon skills already learned during enlistment; screening for hidden disabilities, signs of emerging mental health issues, chronic musculoskeletal pain from war, or traumatic brain injuries impacting learning; tutoring, test preparation, writing, and time management classes; and providing mentors with skills relevant to veterans. The NEPQR-VNPC also provides preceptor training and continuing education for nurses working at their clinical partner sites to bring them up to date on the current, expanded role of RNs. The faculty set protocols to help admissions office personnel understand G.I. Bill benefits and military transcripts, and civilian students learn about military culture and experiences through clinical exercises, symposiums, and case scenarios.

Nurse Education, Practice, Quality and Retention - Registered Nurses in Primary Care Training Program

Program Purpose and Cooperative Agreement Information

The NEPQR-Registered Nurses in Primary Care (NEPQR-RNPC) Training Program was designed to recruit and train nursing students and RNs to practice to the full scope of their license in community-based primary care teams. The goal of this program is to increase access to care with an emphasis on chronic disease prevention and control, including mental health and substance use disorder conditions. The program aims to achieve a sustainable primary care nursing workforce equipped with the competencies necessary to address pressing national public health issues. The program also seeks to improve the distribution of the nursing workforce in areas of need, access to care, and population health outcomes by strengthening the capacity for basic nurse education and practice.

Program Activities

NEPQR-RNPC recipients establish or expand academic-practice partnerships to train nursing students and support current RNs in non-institutional settings, such as community-based primary care settings. HRSA also encourages partnerships with other non-institutional settings, such as National Health Service Corps sites, Health Centers, FQHCs, Health Center Program Look-Alikes, Nurse-Managed Health Clinics, Rural Health Clinics, and Indian Health Service sites. The NEPQR-RNPC Training Program supports partnerships between academia and clinical practices. To improve access to primary health care in medically underserved communities, NEPQR-RNPC partnerships implement a system for recruitment of primary care-oriented undergraduate nursing students most committed to practicing in non-institutional settings. Recipients provide longitudinal clinical training experiences for undergraduate nursing students in community-based primary care. The NEPQR-RNPC Training Program supports continuing professional development in primary care for practicing RNs, clinical preceptors, and faculty, as well as enhanced didactic and clinical training curricula to integrate primary care, population health, and interprofessional education.

Nurse Education, Practice, Quality and Retention - Simulation Education Training Program

Program Purpose and Cooperative Agreement Information

The NEPQR-Simulation Education Training (NEPQR-SET) Program enhances nurse education and strengthens the nursing workforce through the expansion of experiential learning opportunities. This includes using simulation-based technology, including equipment, to advance the health of patients, families, and communities in rural and medically underserved areas experiencing diseases and conditions that affect public health, such as high burden of stroke, heart disease, behavioral and mental health disorders, maternal mortality, HIV/AIDS, and/or obesity. This program strengthens the capacity of undergraduate public health nursing students to address the complex health care needs of those living in rural and medically underserved areas.

Program Activities

NEPQR-SET award recipients develop and implement innovative and reliable evidence-based simulation training programs that include provisions for rural or medically underserved populations experiencing diseases and conditions that affect public health such as high burden of stroke, heart disease, behavioral and mental health disorders, maternal mortality, HIV/AIDS, and/or obesity. Simulation training programs must include the use of collaborative, interprofessional team-based care and integration of Public Health Nursing Competencies; establish or enhance strategic academic, practice, and community partnerships to inform simulation scenarios; and provide longitudinal community health-based clinical experiences for nursing students to improve access to primary care within medically underserved communities. In addition, recipients will allocate a full-time academic nursing faculty/coordinator to support best practice simulation scenarios.

Nursing Workforce Diversity Programs

The Nursing Workforce Diversity (NWD) programs seek to increase nursing education opportunities for individuals from disadvantaged backgrounds, including ethnic and racial minorities who are underrepresented among RNs. NWD programs increase access to high quality, culturally competent RN providers that reflect the diversity of the communities in which they serve, facilitate diploma or associate degree RNs to become baccalaureate-prepared RNs, and prepare practicing RNs for advanced nursing education. As required by section 805 of the PHS Act, preference in funding is given to projects designed to substantially benefit rural or underserved populations, or to help meet the public health nursing needs in state or local health departments. In FY 2021, NWD programs received \$19.8 million in annual appropriations. Table 4 below provides a summary of FY 2021 awards for the NWD programs.

Table 4: Nursing Workforce Diversity Award Information (FY 2021)

Program Name	Number of Awards	Award Amount
Nursing Workforce Diversity Program	32	\$15,911,720
Nursing Workforce Diversity - Eldercare Enhancement Program	5	\$2,250,956
FY 2021 Total	37	\$18,162,676

Nursing Workforce Diversity Program

Program Purpose and Grant Information

The NWD program supports innovative projects that strengthen and expand the comprehensive use of evidence-based strategies shown to increase the recruitment, enrollment, retention, and graduation of students from disadvantaged backgrounds in schools of nursing. These students

from disadvantaged backgrounds include racial and ethnic minorities who are underrepresented among RNs, and individuals who are educationally and/or economically disadvantaged.

Program Activities

NWD recipients implement a comprehensive systems approach to include five evidence-based strategies successful in supporting students from disadvantaged backgrounds from enrollment through graduation. This approach includes the assessment of the social determinants that impede the educational success of students from disadvantaged backgrounds, identification of the needs of these students, and implementation of tailored, evidence-based strategies to address the social determinants and needs. Evidence-based strategies include academic and peer support tailoring services necessary to facilitate and maintain success of students; professional, academic, and peer mentoring; internal and external partnerships; and student financial support and holistic review incorporating admissions criteria that are evidence-based, driven by the mission of the school of nursing, and consider more than just academic metrics. Award recipients also receive training and technical assistance for holistic review and diversity training from a health professions organization selected by the award recipient.

Nursing Workforce Diversity - Eldercare Enhancement Program

Program Purpose and Grant Information

The NWD – Eldercare Enhancement (NWD-E2) program strengthens the eldercare workforce in rural communities where there are health care disparities related to access and delivery of care through the expansion of these opportunities for students from disadvantaged backgrounds. The NWD-E2 program aims to achieve a sustainable eldercare nursing workforce and equip nursing students with the competencies necessary to address health care disparities related to access and delivery of care to elderly populations in rural and underserved areas.

Program Activities

NWD-E2 award recipients implement a comprehensive systems approach using all of the following evidence-based strategies: assessment of the social determinants of education that impeded the educational success of students from disadvantaged backgrounds; professional, academic, and peer mentoring; student financial support; academic, clinical, and community partnerships; and extensive education and training opportunities to produce a competent eldercare nursing workforce. NWD-E2 partnerships are required to implement a system for recruitment of nursing students from disadvantaged backgrounds most committed to practicing in settings that improve access to eldercare in medically underserved communities; provide enhanced clinical training experiences for undergraduate nursing students in community-based settings, including primary care delivery sites, with an emphasis on eldercare; and enhance didactic and clinical training curricula to integrate the care of elderly populations in rural areas and underserved areas with an emphasis on chronic disease prevention, population health, and health equity.

Nurse Corps Loan Repayment and Scholarship Programs

The Nurse Corps programs address the distribution of nurses by supporting nurses and nursing students committed to working in communities with inadequate access to care. In exchange for scholarships or educational loan repayment, Nurse Corps members fulfill their service obligation by working as nurse faculty in accredited schools of nursing or as nurses in Critical Shortage Facilities (CSFs)¹² located in Health Professional Shortage Areas (HPSAs)¹³ and medically underserved communities around the nation. These include rural communities and other identified geographic areas with populations that lack access to primary care and behavioral health services. The Nurse Corps programs received \$88.1 million in annual appropriations and \$200 million from the American Rescue Plan Act for a total of \$288.1 million in FY 2021. With additional American Rescue Plan Act funding in FY 2021, the Nurse Corps programs supported the nation’s COVID-19 emergency response. In FY 2022, Nurse Corps plans to fully expend remaining supplemental funds.

Table 5 below provides a summary of FY 2021 Nurse Corps awards.

Table 5: Nurse Corps Scholarship Program and Loan Repayment Program Award Information (FY 2021)

FY 2021 Awards	Number of Awards	Award Amount
Nurse Corps Loan Repayment Program	1,587	\$104,919,353
Nurse Corps Scholarship Program	544	\$54,793,487
FY 2021 Total	2,131	\$159,712,840

The Nurse Corps Loan Repayment Program (LRP) supports the recruitment and retention of professional RNs, including APRNs, NPs, and CRNAs who are committed to working in CSFs or as faculty in accredited schools of nursing. The Nurse Corps LRP decreases the economic barriers associated with pursuing careers in CSFs or in academic nursing by repaying 60 percent of the principal and interest on eligible nursing education loans in exchange for 2 years of full-time service at a CSF or in academic nursing, with an optional additional 25 percent of loan repayment in exchange for a third year of full-time service at a CSF.

The Nurse Corps Scholarship Program (SP) awards scholarships to individuals who are enrolled or accepted for enrollment in an accredited school of nursing in exchange for a service commitment of at least 2 years in a CSF after graduation. Nurse Corps SP awards reduce the financial barrier to nursing education for all levels of professional nursing students and increase the pipeline of nurses who will serve in CSFs.

¹² A CSF is a public or private health care facility located in, designated as, or serving a mental health or primary medical care HPSA.

¹³ A HPSA is a geographic area, population group, or health care facility HRSA designated as having a shortage of health professionals. There are three categories of HPSAs: (1) Primary Care; (2) Dental Health; and (3) Mental Health.

Contracts

In FY 2021, HRSA awarded several contracts that provide support to the ANE, NEPQR, and NWD Programs. REI Systems, Inc. was awarded \$375,036 to provide information technology support to HRSA’s Division of Nursing and Public Health programs. This support includes enhancements to the Electronic Handbooks System used to manage awardee applications and reporting. John Snow, Inc. was awarded \$125,279 to provide awardee support and training, technical assistance, analytical support, data verification, reporting-related materials, and Electronic Handbook support and enhancements to the programs that report to the Uniform Data System. By the end of FY 2021, HRSA awarded \$131,000 to provide marketing for the Nurse Corps Programs. Table 6 below provides a summary of FY 2021 contracts for HRSA nursing workforce programs.

Table 6: Contracts Information

Contract Name	Number of Contracts	Contract Amount
REI Systems, Inc.	1	\$375,036
John Snow Incorporated	1	\$125,279
Nurse Corps Marketing	1	\$131,000
Total	3	\$631,315

IV. Nursing Workforce Program Performance

Nursing workforce programs authorized by PHS Act Title VIII submit Annual Performance Reports to HRSA at the end of each AY to comply with statutory and programmatic requirements for performance measurement and evaluation (including specific Title VIII requirements), as well as the Government Performance and Results Act of 1993 (GPRA) and the GPRA Modernization Act of 2010 requirements.

HRSA’s NCHWA and Office of Planning, Analysis and Evaluation submit all performance metrics and requirements to the Office of Management and Budget for public comment and formal approval. Specific performance measurement requirements for each program are available on the HRSA website at <https://bhw.hrsa.gov/grants/reportonyourgrant>. These Office of Management and Budget-approved measures allow HRSA to show progress in meeting HHS and HRSA objectives and demonstrate programmatic compliance with applicable statutory requirements.

In the Annual Performance Report, awardees report on the prior AY’s training and graduation counts associated with their training grant. In this report, outputs and outcomes are presented for AY 2020-2021, the most recent year for which data is available. The results below describe what the programs have accomplished since the FY 2020 Nursing Workforce Report to Congress, which reported combined results from AY 2014-2019. Performance data from the programs presented below indicate programmatic success with increasing the supply of the primary care workforce as well as a focus on the geographical distribution of providers to areas where they are needed most. HRSA

demonstrates success in retaining the nursing workforce in underserved areas by following up with graduates 1 year after program completion, which is also reported below.¹⁴

Advanced Nursing Education

Advanced Nursing Education Workforce Program

In AY 2020-2021, awardees of the ANEW program trained 4,379 nursing students, of which more than one-third were underrepresented minorities and/or from disadvantaged backgrounds (38 percent). The ANEW program produced 1,644 graduates who were ready to enter the health care workforce. Of the 1,627 students who were directly funded by ANEW, the majority trained in primary care settings (77 percent), in medically underserved communities (75 percent), and/or in a setting that offered telehealth (62 percent). Forty-eight percent of students received training in opioid use treatment. More than 65 percent of the students who were directly funded received COVID-19 related training and 37 percent received training in health equity. For individuals for whom 1-year post-graduation data was available, over half were pursuing additional training in medically underserved communities (53 percent). In addition, 51 percent of the recently graduated individuals were working in primary care settings.

To provide clinical training experiences to nursing students, awardees partnered with 2,049 clinical training sites in primary care settings (75 percent), medically underserved communities (65 percent), and/or rural areas (33 percent). More than half of the partner sites provided services to individuals with mental health or substance abuse disorders (51 percent) and uninsured or underinsured individuals and families (52 percent); 21 percent offered services to undocumented immigrants. ANEW awardees developed or enhanced 520 courses for trainees, provided 135 continuing education courses to practicing professionals, and offered 167 faculty and preceptor development programs.

Nurse Anesthetist Traineeship Program

In AY 2020-2021, awardees of the NAT Program provided direct financial support to 1,757 nurse anesthetist students. Students received clinical training in medically underserved communities (81 percent), rural areas (33 percent), and/or primary care settings (23 percent) during the AY. In addition, NAT Program trainees participated in opioid use treatment (81 percent), COVID-19 related training (73 percent), and/or substance use treatment (65 percent). In total, 1,323 students graduated from their degree programs and entered the workforce. At the time of graduation, 52 percent of graduates intended to pursue employment or further training in medically underserved communities, 18 percent planned to pursue employment or further training in primary care settings, and 14 percent planned to pursue employment or further training in rural areas. Of prior year graduates for whom 1-year follow-up data was available, 49 percent were employed in medically underserved and/or rural communities.

Advanced Nursing Education – Sexual Assault Nurse Examiners Program

In AY 2020-2021, awardees from the ANE-SANE program trained 2,360 students and produced 858 graduates. The majority of trainees were from a rural and/or disadvantaged background (57 percent).

¹⁴ Aggregated performance measures for these programs are publicly available at: <https://data.hrsa.gov/topics/health-workforce/training-programs>.

More than half of SANE trainees received their training in medically underserved communities (53 percent) and about one in 10 received training in rural areas (13 percent). Twenty-one percent of students participated in health equity training and 19 percent participated in COVID-19 related training. The ANE-SANE awardees partnered with 169 clinical training sites in medically underserved communities (81 percent), rural areas (28 percent), and/or primary care settings (21 percent). More than 90 percent of the sites provided services to victims of interpersonal violence, abuse, or trauma. ANE-SANE awardees developed and/or enhanced 109 courses, 28 percent of which were focused on evidence-based practice.

Advanced Nursing Education – Nurse Practitioner Residency Program

In AY 2020-2021, the ANE-NPR program trained 319 nurse practitioner residents. Additionally, the program graduated 171 NP residents. Almost all of the NP residents received training in medically underserved communities (99 percent) and/or primary care settings (99 percent). Of current year graduates, 66 percent are employed in primary care settings, 63 percent are employed in medically underserved communities, and 26 percent are employed in rural areas. Of prior year graduates, 77 percent are currently working in primary care settings, 77 percent are currently working in medically underserved communities, and 31 percent are currently working in rural areas. Fifty-two percent of current year graduates and 77 percent of prior year graduates are currently employed in FQHCs or look-alikes and Rural Health Clinics.

Moreover, the majority of the NP residents participated in trainings related to COVID-19 (96 percent), opioid use treatment (90 percent), and/or trained in a setting that offered telehealth (90 percent). The ANE-NPR awardees partnered with 327 clinical training sites to provide experiential training to students. The majority of these sites were located in medically underserved communities (86 percent) and/or primary care settings (68 percent); 42 percent of the sites were in rural areas. Almost 13,000 trainees participated in the 1,508 courses that were developed or enhanced, and the 394 continuing education courses that awardees offered. This program also supported 116 faculty and preceptor development training and activities.

Advanced Nursing Education – Nurse Practitioner Residency Integration Program

In AY 2020-2021, ANE-NPRIP awardees trained 49 NP residents, 22 percent of whom were from underrepresented minority and/or disadvantaged backgrounds. One hundred percent of the NP residents received training in primary care settings and medically underserved communities and 43 percent received training in rural settings. Moreover, all NP residents participated in trainings related to COVID-19 (100 percent), health equity (100 percent), integrated behavioral health in primary care (100 percent), and trained in a setting that offers telehealth (100 percent). Eighty-eight percent of residents received training in MAT for substance use disorder/opioid use disorder, leading to 55 percent of residents receiving a waiver from the Substance Abuse and Mental Health Services Administration to prescribe MAT. The ANE-NPRIP awardees partnered with 85 clinical training sites to provide experiential training to students. Fifty-three percent of the sites were in medically underserved communities, 45 percent were in primary care settings, and 31 percent were located in rural areas. A total of 90 courses were enhanced or developed, ranging in topic from clinical training (32 percent) to behavioral health (26 percent). These courses were offered to over 350 trainees. This program also reached 320 health care professionals and 153 faculty members through 67 continuing education courses and 24 faculty and preceptor development training and activities.

Nurse Faculty Loan Program

In AY 2020-2021, awardees supported 2,763 nursing students pursuing graduate level degrees with the intent of serving as nurse faculty. Twenty-four percent of trainees were underrepresented minorities and 24 percent came from disadvantaged backgrounds. By the end of the AY, the programs graduated 779 trainees, 92 percent of whom intended to teach nursing. One year after graduation, 74 percent of prior year graduates were teaching in faculty appointments.

Additionally, HRSA's BHW recently conducted a 5-year outcome evaluation of NFLP using data from AY 2015-2016 to AY 2019-2020. During this period, BHW funded 203 unique awardees that conducted active NFLP programs. NFLP awardees provided \$147 million in loan repayment funding to between 1,998 and 2,328 nursing students each year pursuing graduate level degrees with the intent of serving as nurse faculty. Over 50 percent of NFLP nursing graduate students focused on education and almost 20 percent focused on research. Throughout the 5-year period, 48 percent of NFLP graduates received Doctorate of Nurse Practitioner degrees and another 26 percent received other types of doctoral degrees. Upon program completion, 91 percent of NFLP graduates intended to teach nursing with 1,969 reporting that they already secured employment as nurse faculty. Within 1 year of completing NFLP, 81 percent of prior year graduates were teaching in faculty appointments.

Nurse Education, Practice, Quality and Retention Programs

Nurse Education, Practice, Quality and Retention – Interprofessional Collaborative Practice: Behavioral Health Integration Program

In AY 2020-2021, NEPQR-IPCP: BHI awardees trained 1,895 individuals and produced 1,097 graduates. Awardees partnered with 73 clinical sites to provide interprofessional team-based training to 1,100 individuals. Three-fourths of the clinical training sites were located in medically underserved communities (75 percent), over two-thirds were in primary care settings (67 percent), and almost half were in rural areas (47 percent). Two-thirds of the clinical training sites offered integrated behavioral health services in a primary care setting (66 percent), 73 percent offered telehealth services, and 58 percent offered COVID-19 related services.

Nurse Education, Practice, Quality and Retention – Veteran Nurses in Primary Care Training Program

In AY 2020-2021, the NEPQR-VNPC program supported 130 veterans pursuing their Bachelor of Science in Nursing. A majority of veterans trained in medically underserved communities (75 percent) and/or primary care settings (50 percent). In addition, trainees participated in COVID-19 related training (53 percent), trained in telehealth (52 percent), and/or trained in opioid use treatment (39 percent). The NEPQR-VNPC awardees partnered with 50 clinical training sites to offer experiential training. The majority of training sites in the NEPQR-VNPC program were in primary care settings (82 percent) and/or medically underserved communities (66 percent). Additionally, clinical sites offered services related to COVID-19 (82 percent), integrated behavioral health services in primary care settings (40 percent), opioid use treatment (32 percent), and/or substance use treatment (32 percent). Awardees enhanced or developed a total of 63 courses; 32 percent of the courses focused on primary care and/or community-based collaboration and 30 percent of the courses focused on veterans' health.

Nurse Education, Practice, Quality and Retention – Registered Nurses in Primary Care Training Program

In AY 2020-2021, the NEPQR-RNPC program trained 2,049 individuals in primary care nursing programs and produced 1,046 graduates. Seven in 10 nursing students participated in training related to COVID-19 (70 percent); additionally, 36 percent received training in substance use treatment and 33 percent received training in opioid use treatment. NEPQR-RNPC awardees partnered with 596 training sites to provide experiential training. These training sites were located in primary care settings (74 percent), medically underserved communities (66 percent), and/or rural areas (41 percent). The majority of the clinical training sites offered COVID-19 related services (71 percent). In addition, clinical sites provided telehealth services (63 percent) and integrated behavioral health services in primary care settings (39 percent). NEPQR-RNPC awardees developed or enhanced 483 courses for students; 31 percent related to primary care and 11 percent related to chronic disease, including mental health and substance use conditions.

Nurse Education, Practice, Quality and Retention – Simulation Education Training Program

In AY 2020-2021, NEPQR-SET awardees trained 2,934 individuals, 71 percent of whom were an underrepresented minority and/or from a disadvantaged background, and produced 1,150 graduates. Awardees partnered with 21 clinical sites to provide training to 460 individuals. Just over three-fourths of the clinical training sites were located in primary care settings (76 percent), 71 percent were in medically underserved communities, and almost one-half were in rural areas (48 percent). Almost all of the sites offered COVID-19 related services (95 percent) and over half offered telehealth services (57 percent). Awardees enhanced or developed 23 courses, 70 percent of which were simulation-based trainings. Thirty percent of the courses focused on health equity or health disparities.

Nursing Workforce Diversity Program

Nursing Workforce Diversity Program

In AY 2020-2021, the NWD program supported 64 college-level degree programs as well as 139 training programs and activities designed to recruit and retain health professions students. These programs trained 10,155 students – 5,953 nursing students enrolled in degree programs and 4,202 participants in academic support programs. A total of 4,653 students graduated or completed their programs. Twenty-nine percent of nursing students in NWD programs identified as Hispanic or Latino (almost five times higher than the national nursing estimates) and 14 percent identified as Black or African American (50 percent higher than the national nursing estimates).¹⁵ The NWD program directly funded 1,603 nursing students, 100 percent of whom were underrepresented minorities and/or from disadvantaged backgrounds.

¹⁵ U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. 2017. Sex, Race, and Ethnic Diversity of U.S., Health Occupations (2011-2015), Rockville, Maryland.

In addition to providing support to students, NWD awardees partnered with 778 training sites during the AY to provide 9,920 clinical training experiences to trainees across all programs. Forty-seven percent of training sites were located in medically underserved communities, 41 percent were in primary care settings, and 16 percent were in rural areas. Seventy-four percent of the sites served elderly populations and 73 percent served the chronically ill.

Nursing Workforce Diversity - Eldercare Enhancement Program

In AY 2020-2021, the NWD-E2 program supported two college-level degree programs and one training program designed to recruit and retain health professions students. These programs trained 63 students—23 nursing students enrolled in degree programs and 40 participants in academic support programs. A total of 12 students graduated or completed their programs. Thirty-nine percent of nursing students in the NWD-E2 Program identified as Black or African American (almost four times higher than the national nursing estimates) and 30 percent identified as Hispanic or Latino (almost five times higher than the national nursing estimates).¹⁶ The NWD-E2 Program directly funded 22 nursing students, 100 percent of whom were underrepresented minorities and/or from disadvantaged backgrounds. Of the six students that graduated the program, five intended to become employed in a medically underserved community and one intended to become employed in a primary care setting.

Nurse Corps Loan Repayment and Scholarship Programs

In FY 2021, the Nurse Corps program received nearly 8,000 new and continuation applications (5,750 LRP and 2,195 SP), and made 2,131 awards (1,587 LRP and 544 SP). Of the 1,587 Nurse Corps LRP awards, 89 percent were made to participants serving at CSFs primarily in a high-need HPSA (defined as areas with a HPSA score of 14 or higher). HRSA made 175 awards to nurse faculty participants, 68 serving at schools of nursing with at least a 50 percent enrollment of students from disadvantaged backgrounds. Approximately 73 percent of SP awards were awarded to bachelor's degree students, 10 percent to master's degree students, and 10 percent to associate degree students.

Due to the additional funding appropriated from the American Rescue Plan Act, Nurse Corps program field strength increased 36 percent, which is the largest in the program's history. As of September 30, 2021, the Nurse Corps LRP field strength includes 2,521 RNs and nurse faculty members fulfilling multi-year service commitments. More than 80 percent of Nurse Corps alumni remain at a CSF beyond the completion of their Nurse Corps service commitment.

In FY 2021, there were 239 Nurse Corps SP graduates from accredited schools of nursing: 63 were serving in a CSF and 176 were actively seeking employment. Graduates have up to 9 months from the date of graduation to obtain a nursing license, accept an offer of employment from a program-approved facility, and begin serving at a CSF.

Nurse Corps LRP and SP participants self-report demographic data. Of the participants who reported on sex, race, and ethnicity, the majority were female and White, with Black or African-

¹⁶ Ibid.

American being the largest minority group (Table 7).¹⁷ Table 7 below provides details of FY 2021 demographics for Nurse Corps programs.

Table 7: Nurse Corps Loan Repayment Program and Scholarship Program Participants' Demographic Characteristics

Nurse Corps LRP and SP Participants' Demographic Characteristics						
FY 2021 Demographics	Nurse Corps LRP		Nurse Corps SP		Total	
Total Awards	1,587		544		2,131	
Sex	#	%	#	%	#	%
Female	1,384	87.21%	493	90.63%	1,877	88.08%
Male	197	12.41%	51	9.38%	248	11.64%
Undisclosed	6	0.38%	0	0.00%	6	0.28%
Race	#	%	#	%	#	%
White	1,020	64.27%	183	33.64%	1,203	56.45%
Black/African-American	330	20.79%	254	46.69%	584	27.40%
Asian	84	5.29%	31	5.70%	115	5.40%
American Indian/Alaskan Native	12	0.76%	5	0.92%	17	0.80%
Native Hawaiian/Pacific Islander	3	0.19%	1	0.18%	4	0.19%
Other Race	37	2.33%	0	0.00%	37	1.74%
Two or More Races	62	3.91%	29	5.33%	91	4.27%
Undisclosed	39	2.46%	41	7.54%	80	3.75%
Ethnicity	#	%	#	%	#	%
Hispanic/Latino	165	10.40%	72	13.24%	237	11.12%
Non-Hispanic/Non-Latino	1,336	84.18%	450	82.72%	1,786	83.81%
Undisclosed	86	5.42%	22	4.04%	108	5.07%

V. Coordination Efforts with Federal Stakeholders

Examples of coordination between HRSA and other federal and non-federal entities include:

- HRSA's BHW collaborated with HRSA's Office of Women's Health, the Department of Justice - Office of Violence Against Women and Office of Victims of Crime, Futures without Violence, and IAFN. These partners participated in HRSA's ANE-SANE Impact Symposium in 2021, and the collaborations provided insight on related sexual assault and intimate partner violence programs, on programmatic and policy barriers, and

¹⁷ Ibid.

on opportunities to improve training, practice, health care delivery systems, and policy on local and state levels. The program also collaborated with HRSA's Bureau of Primary Health Care to increase SANE-related training in health centers.

- HRSA's BHW collaborated with the VA Office of Academic Affiliations to share NP residency program best practices and outcomes. This collaboration increased awareness about the ANE-NPR and ANE-NPRIP programs among federal stakeholders, enhanced knowledge, and established a platform to discuss future coordination efforts. VA was one of several presenters at HRSA's first NP Residency Stakeholder Meeting in October 2021; the meeting brought stakeholders together from all over the United States to disseminate and discuss best practices for NP residency programs.
- HRSA's BHW collaborated with the Future for Nursing: Campaign for Action (an initiative consisting of a collaboration between HHS's Office of Minority Health, American Association of Retired Persons Foundation, and Robert Wood Johnson Foundation) to support increasing the diversity of the nursing workforce. As a part of this collaboration, HRSA was featured on the Learning Collaborative platform to disseminate information about health workforce programs and funding opportunities. HRSA's Division of Nursing and Public Health participates in planning activities to increase training and support for underrepresented student populations in schools of nursing.
- HRSA's BHW collaborated with the National Institute of Mental Health and Advancing Integrated Mental Health Solutions Center to leverage resources and maximize use of the Collaborative Model of Behavioral Health for the NEPQR-IPCP: BHI program. This collaboration resulted in conducting coaching calls for over 1,200 health care providers and conducting 12 site visits to ensure the implementation of the Collaborative Care Model and adherence to proper protocols and operational integrity.
- HRSA's BHW and VA coordinate efforts to support NEPQR-VNPC award recipients. NEPQR-VNPC awardees are encouraged to partner with VA Medical Centers to provide the longitudinal clinical training required for the NEPQR-VNPC program. All of the NEPQR-VNPC award recipients collaborate with VA for activities such as recruitment, curriculum advisement, and advisory boards. All of the NEPQR-VNPC projects have a version of military recognition status and/or military veteran services on their campuses with linkages to VA services.
- HRSA's BHW collaborated with HRSA's Federal Office of Rural Health Policy to expand opportunities for Nurse Corps participants to serve in rural communities. Through this collaboration, the Nurse Corps ensured 1,643 small rural hospitals were activated as eligible CSFs where participants may fulfill their service commitment. This effort will provide increased access in a number of rural communities.
- On August 20, 2021, HRSA's BHW hosted a listening session for the nation's nursing workforce, specifically addressing burnout and resiliency during the COVID-19 pandemic. HRSA gathered feedback from stakeholders on current challenges and how the federal

government can help. HRSA leadership led a robust discussion with representatives from HHS and the White House, along with 220 participants from stakeholder groups and health care organizations.

National Advisory Council for Nursing Education and Practice

The National Advisory Council for Nursing Education and Practice advises and makes recommendations to the Secretary and Congress on policy matters arising in the administration of Title VIII of the PHS Act, which authorizes the nursing workforce training programs discussed above, including a range of issues relating to the nurse workforce, nursing education, and nursing practice improvement. HRSA coordinates the development of the HHS Health Workforce Strategic Plan with the National Advisory Council for Nursing Education and Practice to provide a forward-looking framework for health workforce improvements to identify gaps that exist between the outcomes of programs and projected health workforce needs. In addition, the Advisory Council is responsible for submitting an annual report to the Secretary and Congress on its activities, including findings and recommendations concerning the activities under Title VIII. HRSA regularly reviews these reports to help inform future competitions within these programs.

VI. Summary and Conclusions

HRSA's Nursing Workforce programs are an integral part of the federal government's efforts to develop the nursing workforce. These programs have proven to be effective mechanisms to address the needs of rural and underserved communities as well as to improve the diversity within the nursing profession. HRSA works with a variety of federal stakeholders to help inform its programs. These investments support essential development of the nursing profession and align nursing education and practice with the needs of the nation.