



U.S. Department of Health and Human Services

**Fiscal Year 2018 Report on the Preventive Medicine
and Public Health Training Grant Program**

Submitted to the

Committee on Health, Education, Labor and Pensions

U. S. Senate

and

Committee on Energy and Commerce

U. S. House of Representatives

Executive Summary

This Report to Congress is required by section 768(d) of the Public Health Service Act, which states,

Sec 768(d) REPORT. The Secretary shall submit to the Congress an annual report on the program carried out under this section.

This is the Fiscal Year (FY) 2018 Report to Congress on the Preventive Medicine and Public Health Training Grant Program administered by the Health Resources and Services Administration (HRSA). This report serves as the annual report for FY 2018 and provides a description of activities and funding levels for the grant programs under the Preventive Medicine and Public Health Training Grant Program authority, which includes HRSA's Preventive Medicine Residency (PMR) Program and the Preventive Medicine Residency with Integrative Health Care (PMR-IHC) Training Program.

The goal of HRSA's PMR Program is to increase the number and quality of preventive medicine physicians who address public health needs and advance preventive medicine practices. A new competition for HRSA's PMR Program occurred in FY 2018 for a 5-year project period. HRSA provided new awards to 17 PMR Program awardees with \$6,510,523 in total funding. In addition, six previously funded PMR awardees continued their work through no-cost extensions after their initial project period ended.

The goal of the PMR-IHC Training Program is to enhance or expand preventive medicine residency programs, enhance training on integrative health care, and increase the integration of these fields into primary care training and practice. The PMR-IHC Training Program was competed in FY 2015 for a 3-year project period. In FY 2018, 11 PMR-IHC Training Program projects continued their work through no-cost extensions after their initial project period ended.

Consequently, in FY 2018 HRSA's PMR Program funded 17 new grantees and had 17 (6 PMR and 11 PMR-IHC) previously funded grantees continue their work through no-cost extensions. The reporting period for achievements covered in this report of FY 2018 funding is academic year 2018-2019.



Fiscal Year 2018 Report on the Preventive Medicine and Public Health Training Grant Program

Table of Contents

Executive Summary	i
Table of Contents	ii
List of Tables	iii
Acronym List	iii
I. Legislative Language	4
II. Introduction	4
Preventive Medicine.....	4
Integrative Medicine	6
III. Overview	7
IV. FY 2018 Preventive Medicine Residency Program	7
V. Preventive Medicine Residency with Integrative Health Care Training Program ...	9
FY 2017 PMR Program and Preventive Medicine Residency with Integrative Health Care Training Program Awardees Continuing Under FY 2018 No-Cost Extension	9
VI. Selected Program Highlights	10
Substance and Opioid Use Disorder Prevention and Treatment	11
Integration of Public Health and Primary Care	11
Vulnerable Populations	12
Workforce Diversity and Inclusion	12
Collaborations with the Veterans Health Administration and other Federal Partners	12

I. Legislative Language

This is the Fiscal Year (FY) 2018 Report to Congress on the Preventive Medicine and Public Health Training Grant Programs administered by the Health Resources and Services Administration (HRSA). The HRSA Preventive Medicine and Public Health Training Grant Program is authorized by Sections 765 and 768 of the Public Health Service (PHS) Act (42 U.S.C. 295 and 295c).

The PHS Act requires this report and states:

Sec 768(d) REPORT. The Secretary shall submit to the Congress an annual report on the program carried out under this section.

II. Introduction

HRSA is committed to reducing health disparities by increasing access to quality services and promoting a skilled health professions workforce. One mechanism for achieving increased access is through supporting innovative programs that increase the number and skills of physicians graduating from prevention science and public health programs. Through these innovative programs, participants are prepared to advance public health research, address emerging public health issues, and assume leadership roles within the public health system.

Preventive Medicine

Preventive medicine is one of over 150 specialties and subspecialties recognized by the American Board of Medical Specialties.² Preventive medicine physicians are educated in both clinical medicine and public health. Preventive medicine curricula include biostatistics, epidemiology, environmental and occupational medicine, planning and evaluating health services, managing health care organizations, researching causes of disease and injury in population groups, and practicing prevention in clinical medicine. Within preventive medicine, three specialty areas share common core knowledge, skills, and competencies: public health and general preventive medicine (PH/GPM), aerospace medicine, and occupational medicine.³

- Public health and general preventive medicine focuses on promoting health, preventing disease, and managing the health of communities and defined populations. PH/GPM physicians combine population-based public health skills with knowledge of primary, secondary, and tertiary prevention-oriented clinical practice. These physicians investigate disease outbreaks, assess the medical needs of individuals and populations, counsel patients for health promotion and behavioral changes, implement community-based programs to reduce risk factors for disease, and better manage chronic

² American Board of Medical Specialties (ABMS). (n.d.). About ABMS. Retrieved January 10, 2019 from <http://www.abms.org/about-abms/abms-member-boards-and-associate-members/>.

³ Accreditation Council on Graduate Medical Education (ACGME). (2017, September). ACGME Program Requirements for Graduate Medical Education in Preventive Medicine, p 1. Retrieved January 2, 2019 from <http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/380PreventiveMedicine2018.pdf>.

diseases. Additionally, PH/GPM physicians conduct policy analyses to improve population health; complete research to inform health policy; design and operate surveillance systems; and promote clinical preventive medicine for individuals and populations by following guidelines for clinical preventive services such as immunizations, screening tests, and preventive medications. Preventive medicine physicians and residents engage globally and with state and local health departments in surveillance, research, and prevention of emerging health threats.⁴

- Aerospace medicine focuses on the clinical care, research, and operational support of the health, safety, and performance of crewmembers and passengers of air and space vehicles and the support personnel who assist with the operation of these vehicles. Aerospace medicine physicians develop the scientific evidence that guides health care for the personnel and passengers of air and space vehicles. Through ongoing assessment of the aerospace workforce, these physicians assure the safety of passengers and assess the conditions under which it is safe to operate vehicles.⁵
- Occupational medicine focuses on the health of workers and their ability to perform work. The focus includes the physical, chemical, biological, and social environments of the workplace and the health outcomes of environmental exposures. These residency programs work closely with the Centers for Disease Control and Prevention's National Institute for Occupational Safety and Health and serve as resources for the primary health care personnel who care for agricultural workers and assess and mitigate the health effects of workplace hazards. Residents identify factors present in the workplace affecting health and take steps to ameliorate, prevent, and address the effects of such factors.⁶

Currently, the Accreditation Council for Graduate Medical Education (ACGME) and the American Osteopathic Association accredit preventive medicine residency programs. Beginning July 2020, ACGME will accredit all osteopathic and allopathic preventive medicine residency programs. Training requirements include 2 years of competency-based education and academic- and practicum-based training and the completion of a Master of Public Health or other appropriate postgraduate degree. The ACGME accreditation standards require 4 months of direct patient care in the 24-month preventive medicine residency training. Residents train in hospitals, managed care organizations, health departments, industry, federal government, non-governmental organizations, and community-based organizations.

Accredited preventive medicine residency programs also require at least 1 year of prior graduate medical education clinical training. Preventive medicine residency training often occurs in the second and third postgraduate years (PGY-2 and PGY-3) or mid-career after completion of another specialty. Residents often combine preventive medicine residency training with another specialty, such as family medicine or internal medicine. These programs may be completed sequentially or integrated as a combined training program.

⁴ Ibid., p. 23.

⁵ Ibid., p. 23.

⁶ Ibid., p. 23.

Funding for preventive medicine residents and programs is limited and creates challenges for programs. HRSA, as authorized by Sections 765 and 768 of the PHS Act, is a significant source of federal support for preventive medicine residency programs and public health workforce development. This support strengthens the health workforce infrastructure's ability to address population health and public health issues. The number of new board certified preventive medicine physicians has remained steady at approximately 200 each year from 2006 through 2017 (the last year information was available for this report).⁷ Residency directors report that program curriculum enhancements, new rotations, and the training of as many residents would not occur without HRSA funding.

Integrative Medicine

Integrative medicine places the whole person at the center of care and addresses the full range of physical, psychological, social, spiritual, and environmental influences affecting health while emphasizing the practitioner/provider relationship within that context. These approaches to integrative medicine are evolving to include complementary and alternative therapies and providers. Complementary approaches are non-mainstream practices used together with conventional medicine. Alternative therapies are non-mainstream therapies used in place of conventional medicine.

Integrative medicine enhances preventive medicine. The focus on prevention, individual self-care, and team-based care implicit in integrative medicine is consistent with the prevention focus in preventive medicine residencies. Integrative medicine's focus on prevention, interprofessional delivery of care, and incorporation of lifestyle changes that promote health is key to improving the health of the population.

The principles of integrative medicine support and overlap with the principles and competencies of preventive medicine including:

- the relationship between the patient and practitioner is critical to treatment;
- all factors influencing health, wellness, and disease are taken into consideration;
- care addresses the whole person mind, body, and spirit;
- care uses inquiry-driven and evidence-based principles;
- broader concepts of health promotion and the prevention of illness are the foundation underlying the concept of treatment; and
- individualized care best addresses the person's unique conditions, needs, and circumstances.⁸

Consistent with these principles, integrative medicine also incorporates the five dimensions described in the Institute of Medicine report entitled "Integrative Medicine and the Health of the Public: Summary of the February 2009 Summit." These five dimensions include health care

⁷ American Board of Medical Specialties. (2018). ABMS Board Certification Report 2017-2018, p. 32. Retrieved January 12, 2019 from <https://www.abms.org/media/194885/abms-board-certification-report-2017-2018.pdf>.

⁸ The Bravewell Collaborative. (2011). What is Integrative Medicine?, p.1. Retrieved January 10, 2019 from http://www.bravewell.org/content/Downloads/What_Is_IM_2011.pdf.

that embraces physical, mental, emotional, and spiritual factors; encompasses a full spectrum of health interventions, including approaches to prevention, treatment, rehabilitation, and recovery; emphasizes coordination of care across an array of caregivers and institutions; is patient-centered; and is open to multiple modalities of care (not just “usual care,” but also unconventional care that helps individuals manage, maintain, and restore health).⁹

III. Overview

This report describes the funding levels and selected highlights of the PMR Program, as well as a list of the PMR Program awardees and the Preventive Medicine Residency with Integrative Health Care Training Program (PMR-IHC) awardees that received no-cost extensions in FY 2018.

The goal of HRSA’s PMR Program is to improve the health of communities by increasing the number and quality of preventive medicine physicians who can address public health needs and advance preventive medicine practices. These goals are supported through awards to accredited schools of public health, medicine, or osteopathic medicine; accredited public or private nonprofit hospitals; state, local, or tribal health departments; and through consortiums of two or more of these entities that plan and develop new residency training programs or expand current programs in the specialty of preventive medicine. In FY 2018, HRSA awarded 17 grants, totaling \$6,510,523 to PMR Program awardees.¹⁰ In addition, six previously funded PMR Program awardees received no-cost extensions in FY 2018.

The PMR-IHC Training Program was competed in FY 2015 for a 3-year project period. In FY 2018, 11 PMR-IHC Training Program projects continued their work through no-cost extensions after their original project period ended.

Consequently, in FY 2018 HRSA’s PMR Program funded 17 new grantees and had 17 (6 PMR and 11 PMR-IHC) previously funded grantees continue their work through no-cost extensions.

IV. FY 2018 Preventive Medicine Residency Program

The PMR Program supports residents in training in preventive medicine and includes stipends for residents to defray the costs of living expenses, tuition, and fees. Awardees used the PMR Program funds to plan, develop, and implement preventive medicine curricula; operate or participate in an accredited residency program in preventive medicine; establish and maintain academic administrative units in preventive medicine; and improve clinical teaching in preventive medicine. The PMR Program also provided travel support for residents who presented their research findings at national academic meetings. A portion of the funds provided support for faculty and staff who were directing the program, developing curricula, teaching, and coordinating program activities, including clinical rotations.

⁹ Institute of Medicine. (2009, p. 27). Integrative Medicine and the Health of the Public: Summary of the February 2009 Summit. Retrieved January 10, 2019 from <https://www.nap.edu/read/12668/chapter/3#28>.

¹⁰ The updated details of all current HRSA PMR Program awardees can be accessed online at <https://data.hrsa.gov/tools/find-grants>.

HRSA competed the PMR Program in FY 2018 with a 5-year project period. In FY 2018, 17 PMR Program awardees received \$6,510,523. The funds supported PMR Program awardees' activities for the 2018-2019 academic year. Table 1 presents the list of new awards.

Table 1 – FY 2018 Preventive Medicine Residency Program New Funding and Awards

	State	Awardee	Award (FY 2018)	Discipline
1	California	University of California at Los Angeles	\$399,828	PH/GPM
2	California	California Department of Public Health	\$390,966	PH/GPM
3	California	University of California at San Diego	\$399,478	PH/GPM
4	California	University of California at San Francisco	\$400,000	Occupational Medicine
5	Colorado	University of Colorado Health Sciences Center, Denver	\$399,999	PH/GPM
6	Connecticut	Griffin Hospital, Inc.	\$399,997	PH/GPM
7	Georgia	Emory University	\$388,114	PH/GPM
8	Georgia	Morehouse School of Medicine	\$400,000	PH/GPM
9	Maine	Maine Medical Center	\$393,004	PH/GPM
10	Michigan	University of Michigan, Ann Arbor	\$373,785	PH/GPM
11	Mississippi	University of Mississippi	\$398,974	PH/GPM
12	New Jersey	Rutgers University	\$362,703	PH/GPM
13	New Mexico	University of New Mexico	\$399,988	PH/GPM
14	New York	State University of New York at Stony Brook	\$400,000	PH/GPM
15	North Carolina	University of North Carolina at Chapel Hill	\$374,828	PH/GPM
16	Pennsylvania	University of Pennsylvania	\$398,773	Occupational Medicine
17	West Virginia	West Virginia University	\$230,086	PH/GPM, Occupational Medicine
	Total		\$6,510,523	

V. Preventive Medicine Residency with Integrative Health Care Training Program

The goal of the PMR-IHC Training Program is to improve the health of communities by increasing the number and quality of preventive medicine physicians who can address public health needs, advance preventive medicine practices, increase access to integrative health care, and increase the integration of preventive medicine and integrative health care into primary care training and practice.

All of the awardees are required to:

- increase the number of preventive medicine residents and/or improve training for these residents;
- incorporate evidence-based integrative health care curricula into accredited preventive medicine residency programs; and
- provide interprofessional training of their preventive medicine residents including training in preventive medicine and integrative health care with other primary care or community-based health care trainees or providers.

FY 2017 PMR Program and Preventive Medicine Residency with Integrative Health Care Training Program Awardees Continuing Under FY 2018 No-Cost Extensions

Of the 15 PMR-IHC Training Program awardees that received funding in FY 2015 for a 3 year project period, 11 received no-cost extensions in FY 2018. Additionally, in FY 2018, six previously-funded PMR Program awardees continued their work through no-cost extensions after their initial project period ended. Table 2 lists the awardees receiving no-cost extensions in FY 2018 for both the PMR Program and the PMR-IHC Training Program.

Table 2 – Preventive Medicine Residency Program and Preventive Medicine with Integrative Healthcare Program Awardees Continuing Under No-Cost Extension in FY 2018

	State	Awardee	Discipline	PMR / PMR-IHC
1	California	University of California at San Francisco	Occupational Medicine	PMR
2	California	California State Department of Public Health	PH/GPM	PMR-IHC
3	California	University of California at Los Angeles	PH/GPM	PMR-IHC
4	Colorado	University of Colorado	PH/GPM	PMR-IHC
5	Illinois	Cook County Health & Hospitals Hektoen Institute	PH/GPM	PMR-IHC

	State	Awardee	Discipline	PMR / PMR-IHC
6	Louisiana	Tulane University	PH/GPM	PMR-IHC
7	Massachusetts	Boston Medical Center	PH/GPM & Internal Medicine	PMR-IHC
8	Massachusetts	Boston Medical Center	PH/GPM & Internal Medicine	PMR
9	Maryland	Johns Hopkins University (90 day no-cost extension)	PH/GPM	PMR-IHC
10	North Carolina	University of North Carolina	PH/GPM	PMR
11	New Jersey	Rutgers University	PH/GPM	PMR-IHC
12	New York	State University of New York at Stony Brook	PH/GPM	PMR-IHC
13	New York	Albert Einstein College of Medicine	PH/GPM & Family Medicine	PMR-IHC
14	South Carolina	University of South Carolina	PH/GPM	PMR
15	Tennessee	Meharry Medical College	Occupational Medicine & PH/GPM	PMR-IHC
16	Tennessee	Meharry Medical College	Occupational Medicine & PH/GPM	PMR
17	Utah	University of Utah	PH/GPM	PMR

VI. Selected Program Highlights

In academic year 2018-2019, the PMR Program awardees continue to provide assistance and learning experiences in state and local health departments and to address current public health issues. Each program focuses on meeting the needs of underserved populations. In addition, all programs require their residents to have both academic and practicum experience focused on addressing the proposed Healthy People 2030 Objectives (<https://www.healthypeople.gov>) and incorporating clinical preventive services in their curriculum as well as clinical and population health practice. By addressing the needs of vulnerable and diverse populations these awardees focus on training in prevention and public health that contributes to HRSA's goals of improving access to quality services, building healthy communities, and reducing health disparities. The physicians who complete these programs provide surveillance for infectious diseases and establish the infrastructure for early prevention, early identification, and treatment.

Substance and Opioid Use Disorder Prevention and Treatment

PMR awardees have implemented a large number of initiatives to address the current opioid crisis. The **University of Pennsylvania** trained residents in opioid use disorder (OUD) prevention and treatment and the faculty developed curricular elements to teach effective pain management emphasizing non-opioid approaches. Residents at the **University of Michigan** partnered with the local health department and community organizations to treat and prevent addiction in community-based settings. Residents at the **California Department of Public Health** completed training in providing medication assisted treatment of OUD, helping homeless, incarcerated, and uninsured persons. The **University of Mississippi** program is developing curricular elements in opioid abuse, alcohol abuse, and nutrition counseling.

At **Emory University**, residents participate in the Atlanta Veterans Affairs (VA) Medical Center's Empower Veterans Program – an intervention for managing chronic pain, including its relation to opioid abuse, and motivational interviewing of higher-needs veterans.

The University of North Carolina residency program collaborated with the university's addiction medicine fellowship; the two program directors have brought population health training to the addiction medicine fellows and education in OUD prevention and treatment to the preventive medicine residents.

The program at **Griffin Hospital** (affiliated with Yale School of Medicine) improved and expanded its preventive medicine residency by launching Project ORACLE, a program to train future preventive medicine residents and faculty with competencies including addiction medicine.

Integration of Public Health and Primary Care

These awardees developed relationships with Federally Qualified Health Centers (FQHC) or other community health centers that provide primary care to underserved communities. Rotations at these organizations train residents to address the social determinants of health, including patients' living situations, access to health care resources, and the environment's effect on health. Faculty of the **State University of New York at Stony Brook** program authored a paper that details several innovative teaching tools and approaches for instruction in population health, including the integration of public health with primary care, to better care for underserved persons.¹¹

Some residency directors, such as the Director of the **University of California at San Diego** program, who is also the medical director of a FQHC provide opportunities for residents to integrate preventive services into primary care, and provide regular primary care at their clinics.

¹¹ Jadotte, D., Leisy, H., Noel, K., and Lane, D. (2019, April). The Emerging Identity of the Preventive Medicine Specialty: A Model for the Population Health Transition. *American Journal of Preventive Medicine*, Volume 26, 614-621. Retrieved May 29, 2019 from <https://www.sciencedirect.com/science/article/pii/S0749379718324279>.

Vulnerable Populations

The preparation of physicians to care for vulnerable populations and the development of curriculum content, rotations, and scholarly projects focused on these populations is the emphasis of many of the awardees' programs. The scholarly projects provide evidence needed to increase effective care for these special populations. A focus of the **University of California at San Francisco** Occupational Medicine Residency training program is vulnerable populations, and the awardee has developed a course entitled "Vulnerable Workers and Communities at Environmental Risk." The presentations within this course include "The Vulnerable Worker: Notes from the Field," "How Medical Humanities Can Inform Our Thinking about Vulnerable Populations," and "Lung Diseases, Miners, and Mining Communities: A Global Population at Risk."

The **University of California at San Francisco**'s residents provide consultation on workplace exposures for agricultural workers at an occupational health clinic.

The **University of New Mexico** developed a curriculum in Telehealth for Vulnerable Populations in which residents will work, via Project ECHO (Extension for Community Healthcare Outcomes), with vulnerable populations, including the incarcerated, with training for all incoming male inmates focused on the hepatitis C virus, HIV, and infection control.

At the **University of Colorado**, a resident project at Denver Community Health Services examines rates of chronic disease, mental illness, and health care use among refugees presenting in one of the local FQHCs.

Workforce Diversity and Inclusion

Many awardees, including **University of Colorado, University of Michigan, University of North Carolina, Morehouse School of Medicine, and University of Pennsylvania**, strive to enhance the diversity of the preventive medicine workforce through recruitment and mentorship strategies. The **University of Colorado** offers travel fellowships for potential applicants from underrepresented minority backgrounds to provide applicants with the opportunity to visit the setting and faculty in person. The **University of Michigan** supports an ongoing committee to increase outreach to potential applicants from underrepresented backgrounds.

Collaborations with the Veterans Health Administration and other Federal Partners

Most awardees work closely with the Veterans Health Administration (VHA), FQHCs, and other Federal partners to ensure that preventive medicine residents address the needs of veterans, develop innovative methods of wellness promotion, and address chronic pain and post-traumatic stress disorder. The **West Virginia University** program has an active affiliation with the Louis A. Johnson VA Medical Center in Clarksburg, West Virginia. The Program Director serves on WVU's Affiliation Partnership Council with the VHA, and all occupational medicine residents rotate through the VA Medical Center. In addition, all occupational medicine residents complete

6-month rotations at the National Institute for Occupational Safety and Health in Morgantown and participate in national-level field investigations.

The **University of Colorado** preventive medicine residency works with the Rocky Mountain Regional VA Medical Center staff to update resident training in motivational interviewing and with VA Preventive Medicine-trained physicians to enhance quality improvement education and apply it to VA settings. The program is also developing a proposal for a VA home cardiac rehabilitation program.

Maine Medical Center, University of Pennsylvania, and the University of California at Los Angeles all have partnerships with their local VA. The program at **Rutgers University** partners with the local VHA and residents spend 6 months in direct care, patient education, and program evaluation. Each resident rotates through the War Related Illness and Injury Center aiding and learning from activities for wounded warriors.

VII. Summary and Conclusions

HRSA is committed to increasing the health care workforce, including preventive medicine physicians. This is accomplished through innovative programs that increase access to quality health care by developing a strong workforce to meet the nation's health care and public health needs. Health priorities, such as emerging infectious diseases and non-communicable chronic diseases, present tremendous challenges and require solutions involving prevention, public health strategies, and leadership. Preventive medicine physicians, through their clinical and public health preparation, provide this essential leadership and expertise in many areas of health care including integrating public health with primary care, providing leadership in governmental public health, and conducting outbreak investigations to prevent the spread of emerging diseases.

This report describes the efforts undertaken by HRSA's PMR programs to increase the number and quality of preventive medicine physicians who address public health needs. These efforts demonstrate how the funded programs advance key components of health service delivery, strengthen the health care system's focus on prevention and health promotion, increase interprofessional training, and improve the quality of care delivered through community health centers by strengthening the collaboration with public health systems.

The preventive medicine physicians that complete these programs contribute to HRSA's mission to improve health and reduce health disparities through access to quality services, a skilled health workforce, and innovative programs. The residents who complete the program practice in and lead local health departments, state health departments, and federal agencies; serve as medical directors in community health centers and researchers and educators in academic settings; and work as quality improvement specialists and medical informaticians (specialists in health information technology, such as electronic medical records).¹² They also assume leadership positions in preventive medicine in the military. The program participants, through their clinical and public health role in a wide variety of settings including community health centers, public

¹² Information received from residency directors during regular project monitoring.

health, and private practice, promote the incorporation of public health and preventive health care into primary care. Residency program participants use community health assessments and other public health approaches to improve community health outcomes targeting community-driven priorities.