Fiscal Year 2014 Report on the Preventive Medicine and Public Health Training Grant and Integrative Medicine Programs

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 is the fiscal year (FY) 2014 Report to Congress on the Preventive Medicine and Public Health Training Grant (Preventive Medicine Residency) and Integrative Medicine Programs, administered by the Health Resources and Services Administration (HRSA). The report includes highlights of activities carried out by Preventive Medicine Residency Program grantees for academic year (AY) 2014-2015.

The HRSA Preventive Medicine Residency Program is authorized under Section 768 of the Public Health Service (PHS) Act. The Integrative Medicine Program (IMP) is authorized under Sections 765 and 768 of the PHS Act. The report is required by Section 768(d) of the PHS Act. The Explanatory Statement, submitted by the House Committee on Appropriations, regarding the Consolidated Appropriations Act of 2014 provided guidance to HRSA to support these activities. Specifically, the Explanatory Statement provided, “In addition, the bill includes not less than $2,000,000 for the Integrative Medicine Program for a new competitive award to support a national center of excellence on integrative primary care.”

This report provides a description and funding levels of the Preventive Medicine Residency Program and IMP grants that were awarded in FY 2014, and thus, active in AY 2014-2015. The report will include information on: (1) the Preventive Medicine Residency Program; (2) IMP activities; (3) the National coordinating center for Integrated Medicine (NccIM) cooperative agreement; and (4) the Center for Integrative Medicine in Primary Care (CIMPC).

HRSA awarded 10 Preventive Medicine Residency Program grants in FY 2014 totaling $4,064,983. Three of these awards were new and seven were non-competing continuation awards. HRSA originally funded 12 IMP grants for a 2-year project period from FY 2012 to FY 2014, totaling $1,785,233. While HRSA did not receive additional funding in FY 2014 for the IMP program, 6 of the 12 original grantees were granted extensions through the end of AY 2014-2015 to complete their activities. Information on activities conducted during that period are included in this report.

HRSA fully funded the NccIM cooperative agreement award in FY 2012 for a 2-year project period to serve as a convener and provider of technical support to IMP grantees as they developed the competencies for integrative medicine in preventive medicine education for technical assistance, collection of data, evaluation, and faculty development. The NccIM awardee—the American College of Preventive Medicine—received $773,676 during the project period and received an extension through the end of AY 2014-2015 to complete its work; thus is included in this report.

In FY 2014, HRSA fully funded the new CIMPC cooperative agreement for a 3-year project period (which began September 1, 2014) to enhance curricula for primary care providers by adding content on integrative medicine and integrative health care. The CIMPC awardee—the University of Arizona Center for Integrative Medicine—received $1,699,998 for the 3-year project period.
# Acronym List

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AM</td>
<td>Aerospace Medicine</td>
</tr>
<tr>
<td>ACGME</td>
<td>Accreditation Council for Graduate Medical Education</td>
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<tr>
<td>ACPM</td>
<td>American College of Preventive Medicine</td>
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<tr>
<td>AY</td>
<td>Academic Year</td>
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<tr>
<td>CAM</td>
<td>Complementary and Alternative Medicine</td>
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<tr>
<td>CIMPC</td>
<td>Center for Integrative Medicine in Primary Care</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal Year</td>
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<tr>
<td>GME</td>
<td>Graduate Medical Education</td>
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<tr>
<td>HRSA</td>
<td>Health Resources and Services Administration</td>
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<tr>
<td>IMP</td>
<td>HRSA Integrative Medicine Program</td>
</tr>
<tr>
<td>IMPriME</td>
<td>Integrative Medicine in Preventive Medicine Education Center</td>
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<tr>
<td>NccIM</td>
<td>National coordinating center for Integrated Medicine</td>
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<tr>
<td>OM</td>
<td>Occupational Medicine</td>
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<tr>
<td>PGY- #</td>
<td>Postgraduate year (also known as residency). PGY-1 is the first year of graduate training after completion of the formal 4 years of medical school. Similarly, PGY-2 and PGY-3 are the abbreviations for postgraduate year 2 and 3. The 2-year Preventive Medicine Program starts in a resident’s PGY-2.</td>
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<tr>
<td>PH/GPM</td>
<td>Public Health and General Preventive Medicine</td>
</tr>
<tr>
<td>PHS</td>
<td>Public Health Service</td>
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I. Legislative Language

This is the fiscal year (FY) 2014 Report to Congress on the Preventive Medicine and Public Health Training Grant (Preventive Medicine Residency) and Integrative Medicine Programs, administered by the Health Resources and Services Administration (HRSA). The HRSA Preventive Medicine and Public Health Training Grant and Integrative Medicine Programs (IMP) are authorized by Section 765 (42 U.S.C. 295) of the Public Health Service (PHS) Act, as amended by Section 5206 of the Affordable Care Act (P.L. 111-148), and Section 768 (42 U.S.C. 295c) of the PHS Act, as amended by Section 10501(m)(1) of the Affordable Care Act (P.L. 111-148).

The Explanatory Statement, submitted by the House Committee on Appropriations, regarding the Consolidated Appropriations Act of 2014 provided guidance to HRSA to support the IMP and the Center for Integrative Medicine in Primary Care (CIMPC). Specifically, the Explanatory Statement provided, “In addition, the bill includes not less than $2,000,000 for the Integrative Medicine Program for a new competitive award to support a national center of excellence on integrative primary care.”

This report is required by Section 768(d) of the PHS Act. Section 768 states, in part:

(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 improving health equity by increasing access to quality services and promoting a skilled health professions workforce. One mechanism for achieving this is through supporting innovative programs that increase the number and skills of physicians educated in prevention science and public health, who in turn are prepared to build the evidence base for prevention and to assume leadership at all levels of the public health system.

Preventive medicine is one of the more than 150 medical specialties and subspecialties recognized by the 24-member boards of the American Board of Medical Specialties. Preventive medicine physicians are educated in both clinical medicine and public health. Examples of curriculum content for preventive medicine include biostatistics, epidemiology, environmental and occupational medicine, planning and evaluation of health services, management of health care organizations, research into causes of disease and injury in population groups, and the practice of prevention in clinical medicine. Within preventive medicine, there are three specialty areas that share common core knowledge, skills, and competencies, but emphasize different

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1 American Board of Medical Specialties website: [http://www.abms.org/About_ABMS/member_boards.aspx](http://www.abms.org/About_ABMS/member_boards.aspx), accessed December 11, 2015.
populations, environments, or practice settings. These areas are public health and general preventive medicine (PH/GPM), aerospace medicine (AM), and occupational medicine (OM).  

- **Public Health and General Preventive Medicine** focuses on promoting health, preventing disease, and managing the health of communities and defined populations. The 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 both individuals and populations; counsel patients for health promotion behavioral changes; implement community-based programs that reduce the exposure to disease risk factors or better manage chronic diseases; 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 such as following guidelines for clinical preventive services like immunizations, screening tests, and preventive medications. For example, select PH/GPM-trained physicians played an active role in helping to allocate resources, determining priorities, and helping to coordinate efforts in the recent global Ebola crisis. In addition, certain residency programs provided practice experience in local public health to educate health professionals on Ebola.

- **Aerospace Medicine** focuses on the clinical care, research, and operational support of the health, safety, and performance of crew members and passengers of air and space vehicles, working together with support personnel who assist with the operation of such vehicles. AM 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, they assure the safety of the passengers. They assess the conditions under which it is safe to operate these vehicles.

- **Occupational Medicine** focuses on the health of workers, including the ability to perform work; the physical, chemical, biological, and social environments of the workplace; and the health outcomes of environmental exposures. These residency programs have a close relationship 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 migrants and assess the health effects of workplace hazards. Residents are able to identify factors affecting health that are present in the workplace and to take steps to ameliorate, prevent, and address the effects of such factors.

Preventive medicine residency programs are accredited by the Accreditation Council for Graduate Medical Education (ACGME) and/or the American Osteopathic Association. As of July 2011, new ACGME accreditation standards require 4 months of direct patient care in the 24-month residency training, which is a minimum of 2 months each year. The training

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2 Accreditation Council on Graduate Medical Education (ACGME) - preventive medicine definition.  

3 Ibid.

4 Ibid.
requirements consist of 2 years of competency-based education and academic- and practicum-based training that incorporates the attainment of a Master of Public Health or other appropriate postgraduate degree. Accredited preventive medicine residency programs require prior graduate medical education (GME) training comprised of at least 1 year of clinical training. Many residents complete preventive medicine training after they have completed another specialty. Thus, preventive medicine residency training occurs in the second and third postgraduate years (PGY-2 and PGY-3). Residents often combine preventive medicine residency training with another specialty, such as family medicine or internal medicine.

Sources of funding for preventive medicine residents and programs are limited. This creates several challenges and barriers when programs are attempting to fund these positions. HRSA is the primary source of federal support for preventive medicine residency programs and public health workforce development, as authorized in Title VII of the PHS Act. HRSA provides support to strengthen the health workforce infrastructure to address population health and public health issues. In 2014, the Institute of Medicine published a report, *Graduate Medical Education That Meets the Nation’s Health Needs*, which proposed significant revisions to the GME system to rectify perceived shortcomings.5

### III. Overview

This report provides a description, funding levels, and accomplishments of the following activities: (1) the Preventive Medicine Residency Program; (2) the IMP; (3) the National coordinating center for Integrated Medicine (NccIM); and (4) the CIMPC. The goal of HRSA’s Preventive Medicine Residency Program is to make grants for accredited schools of public health, medicine, or osteopathic medicine; accredited public or private nonprofit hospitals; state, local, or Tribal health departments; or a consortium of two or more of these entities to plan and develop new residency training programs and expand current ones in the specialty of preventive medicine. In FY 2014, HRSA awarded 10 Preventive Medicine Residency Program grants totaling $4,064,983. Three of these awards were new and seven were non-competing continuation awards.

The goal of the IMP is to award grants to accredited preventive medicine residency programs, which support activities that: (1) incorporate evidence-based integrative medicine content into existing preventive medicine residency programs, (2) provide faculty development to improve clinical teaching in both preventive and evidence-based integrative medicine, and (3) facilitate delivery of related information that will be measured through competency development and assessment of the trainees.

HRSA originally funded 12 IMP grants for a 2-year project period from FY 2012 to FY 2014, totaling $1,785,233. While HRSA did not receive additional funding for the IMP projects in FY 2014, 6 of the 12 original IMP grantees were granted extensions through the end of Academic Year (AY) 2014-2015 to complete their activities; therefore, those activities are included in this

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report. The NccIM awardee, the American College of Preventive Medicine (ACPM), received $773,676 in FY 2012 and also received an extension through the end of AY 2014-2015 to complete its activities; thus, those activities are reported here.

In FY 2014, HRSA fully funded the new CIMPC for a 3-year project period (which began September 1, 2014) to enhance curricula for primary care providers by adding content on integrative medicine and integrative health care. The CIMPC awardee – the University of Arizona Center for Integrative Medicine – received $1,699,998 for the entire 3-year period.

IV. **HRSA Preventive Medicine Residency Program**

**Program Funding**

The Preventive Medicine Residency Program provides support for residents in medical training in preventive medicine, including stipends for residents to defray the costs associated with living expenses, tuition, and fees.

In FY 2014, 10 grantees were funded for a total of $4,064,983, with an average award of $406,498. Of these 10 grantees, 7 received non-competing continuation funding for the second year of their 5-year project period, and 3 were new awards that received funding for their first budget period of a 4-year project period. Seven of the eight grantees that were funded in FY 2013 for a 5-year project period received non-competing continuation awards in FY 2014. One of the grantees funded in FY 2013 for the purpose of developing a new preventive medicine program was unable to achieve accreditation during its first budget period. Therefore, according to program policy, it could not receive funding for its second budget period. This program voluntarily relinquished its award because it had not achieved accreditation.

The new grantees were awarded a 4-year project period in order to be eligible for a competing cycle at the same time as those grantees funded in FY 2013 with a 5-year project period.

Preventive Medicine Residency Program grant funds were used to plan and develop 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 Preventive Medicine Residency Program also provided travel support for those 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.

Table 1 provides data on the seven grantees that received funding for their second budget period. Table 2 provides data on the three grantees that were newly funded in FY 2014. The table lists award amounts for each grantees and includes the specialty discipline within preventive medicine that was supported by each grantees.
Table 1 - Preventive Medicine Residency Program Grantees Non-Competing Continuation Awards – FY 2014

<table>
<thead>
<tr>
<th>State</th>
<th>Grantee</th>
<th>Award (FY 2014)</th>
<th>Discipline*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>University of Colorado Health Sciences Center, Denver</td>
<td>$472,442</td>
<td>PH/GPM</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Boston Medical Center</td>
<td>$474,689</td>
<td>PH/GPM combined with Internal Medicine</td>
</tr>
<tr>
<td>Michigan</td>
<td>University of Michigan, Ann Arbor</td>
<td>$340,000</td>
<td>PH/GPM</td>
</tr>
<tr>
<td>North Carolina</td>
<td>University of North Carolina</td>
<td>$561,518</td>
<td>PH/GPM</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>University of Pennsylvania</td>
<td>$441,296</td>
<td>OM</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Meharry Medical College</td>
<td>$400,000</td>
<td>PH/GPM and OM</td>
</tr>
<tr>
<td>Utah</td>
<td>University of Utah</td>
<td>$337,081</td>
<td>OM</td>
</tr>
<tr>
<td><strong>Total non-competing awards</strong></td>
<td></td>
<td><strong>$3,027,026</strong></td>
<td></td>
</tr>
</tbody>
</table>

The total amount of the three new and seven non-competing continuation awards was $4,064,983.

Program Highlights

The following are highlights of activities carried out by Preventive Medicine Residency Program grantees for AY 2014-2015 using funds appropriated in FY 2014. All of the grantees provided assistance and learning experiences in state and local health departments and addressed current public health issues. Each program had a focus on meeting the needs of underserved...
populations, and all programs required their residents to have experience with clinical preventive services.

University of Colorado (Continuation Grant):

- Focused on the needs of rural populations. Residents assessed mental health needs in rural communities in central and northeastern Colorado. Results of needs assessments were incorporated into the 2017 Eagle County Community Health Improvement Plan and were used as recommendations to fund improvements in mental health services.
- Provided rotations for residents to analyze hospitalization rates for ambulatory-care sensitive conditions in southeastern Colorado communities where poor health outcomes and high hospitalization rates were identified. These reports were shared with state funding agencies that prioritize funding of community health programs in disadvantaged parts of Colorado.
- Coordinated and implemented Denver’s first National Hepatitis Testing Day and identified substantial numbers of new cases needing treatment among low-income and homeless populations.
- Placed two-thirds of funded program graduates in clinical, research, or policy practice in medically underserved communities, and eight of the residents and graduates were first author on peer-reviewed papers and publications. Many of these papers were related to disadvantaged populations.

Boston Medical Center (Continuation Grant):

- Achieved accreditation from ACGME for a 4-year combined dual program of preventive medicine and internal medicine that will prepare the resident to sit for board certification in both preventive medicine and internal medicine in 4 years instead of 5 years. Having physicians prepared and skilled in both internal medicine and preventive medicine will enable providers to use population health data, as well as community and public health resources, and not only incorporate them into their clinical practice, but also target their community needs, while addressing local policies and increasing the delivery of clinical preventive services.
- Continued the existing 2-year preventive medicine program offered for those residents that have already completed a primary care residency, in addition to the dual program. Provided rotations focusing on the needs of vulnerable populations.
- Enrolled one new resident and continued three residents in PGY-3 in the general preventive medicine program.
University of Michigan at Ann Arbor (Continuation Grant):

- Focused on partnering with Health Center Program grantees (Health Centers) in rural and medically underserved communities to provide rotations for residents to serve these populations.
- Collaborated with the Primary Care Association of Michigan to develop additional rotation sites, including new partnerships with additional Health Centers.
- Continued affiliation agreements at both the Detroit Department of Health and Wellness Promotion and affiliated Institute for Population Health to develop an integrated public health and primary care curriculum. Provided clinical preventive and public health services for the low income medically underserved populations served by these organizations.
- Provided education for public health and primary health care providers on assessment and prevention of transmission of Ebola.

University of North Carolina (Continuation Grant):

- Focused on health disparities and access to care for underserved populations, as well as population-based approaches to violence/injury prevention, cancer prevention, and the development of policies for the provision of clinical preventive services.
- Increased enrollment from seven to nine residents, focused on population-based approaches to clinical preventive services, and provided individualized educational plans through rotations for residents.
- Conducted a project to study patterns of colorectal cancer screening uptake and evaluated interventions to increase the screening.
- Contributed to outbreak investigation and emergency preparedness. For example, a resident led an ACPM-sponsored webinar tabletop exercise on Ebola preparedness. About 30 preventive medicine residents from all over the United States participated. In addition, the two program completers published four manuscripts in 2014 on Ebola and emergency preparedness.

University of Pennsylvania (Continuation Grant):

- Focused on supporting rotations for residents in occupational and environmental health, accepted 6 new residents in July 2014, and moved 6 residents from the first to the second year for a total of 12 residents progressing through the program.
- Provided five 2-month subject-area rotations addressing specific competencies for first-year residents. Some subject-area rotations were: Industrial Hygiene II; Advanced and Emerging Topics in Organization Management; Career, Personal Development Negotiation, Travel Medicine; Emergency Disaster Preparedness; and Hyperbaric Medicine.
- Implemented a 5-hour workshop for the residents on Clinical Preventive Medicine, Worksite Wellness, Behavior Change Counseling, and Cultural Competency.
- Selected projects included informational guides and sessions on Ebola, participation in the ProMedica Ebola preparedness steering committee, involvement in outbreak
investigations such as Ebola screening at airports, the creation of an Ebola kit for paramedics who were flying in Niger to transport patients to higher levels of care in Niger, and screening of detainees at detention centers coming into the United States.

**Meharry Medical College (Continuation Grant):**

- Implemented both OM and PH/GPM tracks by admitting residents, carrying out the curricula and refining it, facilitating progression through the program to graduation, and evaluating outcomes.
- Provided rotations for all six occupational medicine and four general preventive medicine residents at preventive medicine clinics serving veterans. The clinics are Veterans Health Administration facilities.
- Collaborated with a U.S. Department of Agriculture program to provide training in nutrition to undergraduate students, medical students, post-graduate physician and non-physician trainees, and practicing doctors.
- Provided experiences relating to health and safety of migrant farm workers, hepatitis prevention in prisons, treatment of chronic pain for HIV and cancer patients, and cycling safety.

**University of Utah (Continuation Grant):**

- Provided experience in public health and primary care integration in OM for residents, which focused on general preventive screening for occupational hazards, identifying exposures, and handling workers’ compensation cases. In addition, provided onsite assistance to mining employees as part of physical exams and injury care.
- Collaborated with the University of Utah Family Medicine Residency Program to develop a combined OM/Family Medicine Residency joint training program.
- Developed and implemented a distance-based education certificate program in occupational health (including AM) that would enable alternative pathway residents to complete the program.
- Developed strategies for incorporation of modules and assessment tools to meet the new ACGME Next Accreditation System.

**University of California at San Francisco (New Grant):**

- Established rotations focused on vulnerable populations, which included a rotation with the Workwell Medical Group in Salinas that serves farmworkers; an elective rotation with the university’s Pediatric Environmental Health Specialty Unit; and a new rotation with an affiliation agreement with the University of California at Berkeley Labor and Occupational Health Project to focus on vulnerable and low wage workers.
- Collaborated with and provided outreach to community clinics and Health Maintenance Organizations in the San Francisco Bay area in order to integrate Occupational and Environmental Medicine issues into community clinics that serve underserved populations and reduce disparities in health outcomes. The program faculty and two residents provided diagnostic consultation for complex clinical problems in occupational and environmental health at the Occupational and Environmental Health Clinic at Mount
Zion clinic that receives referrals of individuals with complex clinical problems in occupational and environmental health.

- Initiated outreach to the Kaiser-University of California at San Francisco Preventive Medicine Residency to recruit new residents into the program with a particular interest in vulnerable and at-risk workers.

**Griffin Hospital, Inc. (New Grant):**

- Provided a dual focus on preventive medicine and internal medicine.
- Developed and implemented two new resident training curricula related to integrating public health into primary care. Implemented content on obesity medicine by developing a relationship with a national expert and rotations at the Massachusetts General Hospital Weight Center.
- Developed a new curriculum in travel medicine through collaboration with the University of Connecticut Travel Medicine Clinic.
- Developed and implemented a curriculum in emergency preparedness and disaster medicine including outbreak investigations. Two residents rotated at the Yale New Haven Health System Center for Emergency Preparedness and Disaster Response. One contributed to an outbreak investigation.

**University of South Carolina (New Grant):**

- Focused on resident recruitment and curriculum development in its first year of funding.
- Created a new didactic series focused on improving health for vulnerable populations including topics related to health disparities, cultural competency, and health literacy. Newly developed rotation activities include:
  - Care for Individuals with HIV or Other Infectious Diseases (in collaboration with the University of South Carolina’s Infectious Disease Division/Ryan White Clinic),
  - Disability Research (in collaboration with the School of Public Health), and
  - Community Health Improvement (in collaboration with Healthy Columbia and the South Carolina Department of Health and Environmental Control).

**V. HRSA Integrative Medicine Program**

Integrative medicine emphasizes the relationship between the practitioner and patient by placing the whole person at the center of care. This approach addresses the full range of physical, psychological, social, spiritual, and environmental influences affecting health. The concepts are evolving and include complementary and alternative therapies and providers.

Integrative medicine enhances preventive medicine programs. The focus on prevention, individual self-care, and team-based care implicit in integrative medicine is consistent with the prevention focus in preventive medicine residency education. The focus of integrative medicine is on prevention, interprofessional delivery of care, and incorporation of lifestyle changes that promote health is of critical importance to improving the health of the population. The principles of integration of non-traditional therapies and approaches complement—and are facilitated by—
the movement to patient-centered medical homes and other coordinated care and case management systems.

The principles of integrative medicine support and overlap with the principles and competencies that are in place for preventive medicine. The defining principles of integrative medicine are that:

- the relationship between the patient and practitioner is critical to treatment;
- all factors that influence health, wellness, and disease are taken into consideration;
- care addresses the whole person, including mind, body and spirit;
- principles are based in good science, are inquiry-driven, and evidence-based;
- alongside the concept of treatment, the broader concepts of health promotion and the prevention of illness are paramount; and
- care is individualized to best address the person’s unique conditions, needs, and circumstances.\(^6\)

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 that: (1) embraces physical, mental, emotional, and spiritual factors; (2) encompasses a full spectrum of health interventions, including approaches to prevention, treatment, rehabilitation, and recovery; (3) emphasizes coordination of care across an array of caregivers and institutions; (4) is patient-centered; and (5) is open to multiple modalities of care, not just “usual care,” but also unconventional care that helps patients manage, maintain, and restore health.\(^7\)

## Program Funding

HRSA originally funded 12 IMP grants for a 2-year project period from FY 2012 to FY 2014, totaling $1,785,233. The average award was $148,766. Of the 12 original grantees, 6 were granted extensions through the end of AY 2014-2015 to complete their activities. The IMP grants were awarded to accredited preventive medicine residency programs which supported activities that: (1) incorporated evidence-based integrative medicine content into existing preventive medicine residency programs, (2) provided faculty development to improve clinical teaching in both preventive and evidence-based integrative medicine, and (3) facilitated delivery of related information that will be measured through competency development and assessment of the trainees.

Table 3 provides a list of the six FY 2012 IMP grantees that worked to complete their activities during AY 2014-2015. No new funds were provided to the grantees in FY 2014.

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Table 3 – Active Integrative Medicine Program Grants in AY 2014-2015

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<thead>
<tr>
<th>State</th>
<th>Grantee</th>
<th>Award (FY 2012)</th>
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<tbody>
<tr>
<td>California</td>
<td>University of California, San Diego</td>
<td>$149,272</td>
</tr>
<tr>
<td>Maryland</td>
<td>University of Maryland</td>
<td>$149,963</td>
</tr>
<tr>
<td>Michigan</td>
<td>University of Michigan</td>
<td>$149,640</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Rutgers, New Jersey Medical School(^8)</td>
<td>$149,748</td>
</tr>
<tr>
<td>New Mexico</td>
<td>University of New Mexico</td>
<td>$150,000</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Meharry Medical College</td>
<td>$149,998</td>
</tr>
</tbody>
</table>

The IMP supported faculty development in the areas of integrative medicine, curriculum development, and education—in both the didactic and the clinical application of the integrative medicine principles for the residents—helping residents achieve competency in the selected areas of integrative medicine.

**Program Highlights**

The six IMP grantees that received extensions through the end of AY 2014-2015 carried out activities related to enhancing the preventive medicine curriculum in integrative medicine for residents, developing faculty knowledge and skills, and facilitating the delivery of related information that has been measured through competency development and assessment of the trainees.

**University of California at San Diego:**

- Residents completed the enhanced curriculum in integrative medicine, including physical activity, diet, exercise counseling, mind-body modalities, and broad exposures to integrative services, which resulted in the ability of the preventive medicine residents to incorporate lifestyle and other integrative modalities into their practice and their research.
- Collaborated with the network of integrative medical services across San Diego County, home to the Pacific College of Oriental Medicine, the University of California’s Center for Integrative Medicine, the Scripps’ Center for Integrative Health, the Bastyr University, and the Alternative Healing Network of San Diego.
- Completed a curriculum entitled “Exercise is Medicine.”

**University of Maryland:**

- Partnered with their Center for Integrative Medicine faculty to provide didactic lectures on integrative medicine to both first- and second-year preventive medicine residents and faculty.

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\(^8\) Originally this grantee was named the University of Medicine and Dentistry of New Jersey – New Jersey Medical School (UMDNJ-NJMS). The institution merged with Rutgers on July 1, 2013.
- Provided stress-reduction group sessions for first- and second-year preventive medicine residents and faculty and implemented two annual resident retreats focused on self-care, play, and learning to work as a team.
- Arranged clinical practicums for preventive medicine residents in the Center for Integrative Medicine outpatient clinic and provided each resident with an individual integrative medicine mentor.
- Collaborated with their institution’s Cochrane Center for Complementary and Alternative Medicine.

University of Michigan:

- Developed an interdisciplinary advisory committee of community integrative medicine providers, public health faculty, preventive medicine practitioners, and resident representatives. This advisory committee provided recommendations for the new integrative medicine competencies.
- Created a required primary care and public health rotation in integrative medicine that used community-based integrative medicine practice sites, including those that serve underserved and culturally diverse populations.
- Supported faculty participation in an existing University of Michigan interprofessional program for faculty development in integrative health care to support residency learning.
- Provided web-based training modules and seminars to teach integrative health care to public health graduate students, medical students, and residents enrolled in preventive medicine seminars.

Rutgers, New Jersey Medical School:

- Developed a formal agreement with its School of Health Related Professions, Institute for Complementary and Alternative Medicine to: (1) provide resident training in integrative medicine and complementary and alternative medicine (CAM), and (2) collaborate and assess faculty and service development in integrative medicine.
- Provided residents with the opportunity for participation in yoga outcomes research projects, examining outcomes related to the effects of yoga on overall health.
- Crafted learning strategies that included case studies, mini grand rounds, journal club, and meetings with physicians who are practicing integrative medicine.
- Worked with the Veterans Affairs New Jersey Health Care System and the Veterans Affairs Wellness Center, to incorporate integrative medicine in the residents' 8-week rotations. Residents worked mostly at the main facility in East Orange, New Jersey, and also worked at satellite offices, the mental health facility in Lyons, New Jersey, and with the telehealth programs (e.g., obesity control groups via telehealth).

The University of New Mexico:

- Adapted the University of Arizona’s Center for Integrative Medicine’s online curriculum for their preventive medicine residents.
- Provided the opportunity for residents to complete educational offerings at the university in traditional healing, such as Curanderismo, the art of Mexican Folk Healing.
• Provided faculty development through a variety of activities. Core faculty members participated in the University of Arizona integrative medicine online curriculum. Faculty attended didactic sessions provided by the Integrative Medicine track faculty members. The associate program director met regularly with the university’s Integrative Medicine track faculty to discuss ongoing educational opportunities. Program representatives participated in the periodic NccIM conference calls, two grantee meetings, workshops, and webinars.

Meharry Medical College:

• Supported a faculty member in completing a 2-year fellowship training program in conjunction with the University of Arizona. This faculty member incorporated knowledge gained through the program into the general preventive medicine and OM curriculum as she was gaining the knowledge.
• Shared knowledge learned with patients and physicians-in-training via clinical services at the Tennessee Valley Veterans Affairs Health Care System in Murfreesboro, Tennessee.
• Provided all preventive medicine residents in the PH/GPM and OM programs with the integrative medicine content in the didactic and clinical experience.
• Supported five faculty members in the instruction of Integrative Medicine curriculum and provided educational encounters through journals, workshops, and other experiences.
• Worked with veterans with Traumatic Brain Injury and Post-Traumatic Stress Disorder, along with their other conditions.

National coordinating center for Integrative Medicine

The NccIM provides technical assistance to the IMP grantees, collects data, evaluates the grantees, provides support for the coordination and evaluation of faculty development programs, and disseminates best practices and lessons learned nationally from the IMP. HRSA fully funded the NccIM cooperative agreement award for FY 2012 to FY 2014 to serve, as a convener and provider of technical support to IMP grantees as they developed competencies for integrative medicine in preventive medicine education. The NccIM awardee – the ACPM – received $773,676 in FY 2012 for a 2-year project, and received an extension through the end of AY 2014-2015 to complete its work. The activities conducted in AY 2014-2015 are included in this report.

The ACPM named their center the Integrative Medicine in Preventive Medicine Education Center (IMPriME). The Steering Committee was composed of interprofessional leaders in integrative medicine that provided content expertise for the project, including the development of competencies and advice for the projects on consultants and resources. The Community of Learning on Integrative Medicine and Preventive Medicine includes partners in preventive medicine training, primary care, and other health professions such as nursing, dentistry, pharmacy, and CAM practitioners.

NccIM helped to maximize the success of the 12 IMP grantees and measure the impact of HRSA’s investment. The NccIM convened the grantees so that they could share information on how they were carrying out their programs and provide a forum for sharing evaluation tools and
methods and developing outcome indicators for success in the program. The NccIM has a greater national scope beyond the individual IMP grantees, including:

- identifying best practices and the evidence base for integrative approaches and CAM therapies;
- disseminating project results to the preventive medicine Community of Learning;
- serving in an advisory capacity to other preventive medicine residency programs;
- carrying out a national role by providing technical assistance to IMP grantees related to planning, developing, and operating training programs; faculty development; consultation; and project evaluation; and
- disseminating information to other preventive medicine programs and other health professions programs.

During FY 2014, the Steering Committee organized curriculum content and the integrative medicine competencies under each of the ACGME standards. These competencies are now being used by IMP grantees and they are available for other preventive medicine residency programs at the ACPM website, [www.imprime.org](http://www.imprime.org). Evidence-based resources are also provided on the website.

NccIM planned and implemented a 16-session webinar series for faculty and resident development. This webinar series was well received by grantees and residents. Several grantees incorporated the webinars into their preventive medicine residency curricula and will continue to do so. The NccIM also convened the steering committee meetings, subcommittee meetings, and managed an iterative consensus building process with grantees to prepare competencies in integrative medicine for preventive medicine education. The NccIM developed a resource center on their website to host grantee resources and made available other resources that could be easily accessed by grantees and others interested in integrative medicine. All faculty development webinars are available on the IMPriME website ([www.imprime.org](http://www.imprime.org)), which is also linked from the ACPM website ([www.acpm.org](http://www.acpm.org)). Participants can receive continuing education units by completing the archived webinar.

The grant extension that NccIM received allows time for ACPM to work with grantees to prepare a supplement to the American Journal of Preventive Medicine on the achievements of the IMP grantees, an overview of the field of integrative medicine in preventive medicine, and a descriptive evaluation of grantee achievements.

**Center for Integrative Medicine in Primary Care**

This center was funded through a cooperative agreement. The CIMPC’s purpose is to add content on integrative health care, including integrative medicine, to build expertise and increase access to providers who practice integrative medicine through didactic and experiential learning opportunities. The learning opportunities are meant to incorporate team building and exposure to both academic and experiential learning with two or more other disciplines. HRSA awarded this cooperative agreement to the University of Arizona Center for Integrative Medicine for $1,699,998 on September 1, 2014. The cooperative agreement was fully funded for a 3-year project period.
The CIMPC was originally created through a partnership between the university’s Center for Integrative Medicine and the Consortium of Academic Health Centers for Integrative Medicine. During AY 2014-2015, the University of Arizona renamed the center as the National Center for Integrative Primary Healthcare. The change was made to better encompass the objectives of the project related to interprofessional learning and interprofessional primary care providers. However, for purposes of this report, the term CIMPC will continue to be used.

During AY 2014-2015, the CIMPC developed meta-competencies for interprofessional integrative primary health care and carried out a consensus building summit with their interprofessional leadership team. The project staff started work on the curriculum, completed a needs assessment, interviewed stakeholders, started work on their website, published and disseminated their first quarterly newsletter, and had an article on the interprofessional competencies accepted for publication.

The CIMPC is required to build on the work of the NccIM and IMP grantees. During this first year of operation, the CIMPC reached out to stakeholders and grantees as they developed an initial draft of interprofessional core meta-competencies for health professionals across the primary care disciplines (i.e., medicine, nursing, public health, behavioral medicine, pharmacy, and others). The project is in the process of adding dentistry and physical therapy. The CIMPC is also collaborating with stakeholders and grantees to participate with needs assessments, sharing of technical expertise with the multiple disciplines providing primary care, assistance with dissemination of information about the project and its deliverables as they are developed, and assistance with pilot testing the curriculum and evaluation.

The CIMPC also began developing an online, evidence-based curriculum to incorporate competency- and evidence-based integrative health care curricula into existing educational programs for practicing primary care providers. Further, the CIMPC is providing guidelines for access to integrative health care in primary care for underserved communities and developing culturally and linguistically appropriate patient education materials. The ultimate goal is to create effective interprofessional teams that will work towards using integrative health care in primary care, help eliminate health disparities in underserved populations, and promote healthy communities.

VI. Summary and Conclusions

HRSA is committed to growing the health care workforce, including preventive medicine physicians, through innovative programs that increase access to quality health care by developing a strong health care workforce to meet the nation’s health care needs. Health priorities such as emerging infectious diseases and non-communicable chronic diseases (including multiple chronic conditions across the life span) 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 such as integrating public health with primary care and conducting outbreak investigations to prevent the spread of emerging diseases.
This Report to Congress describes the efforts of the Preventive Medicine Residency Program, the IMP, the NccIM, and the CIMPC to support the needs of a changing health workforce. It demonstrates how the funded programs continue to help forward key components of health service delivery reform policy to strengthen the focus on prevention and health promotion, increase interprofessional team work, and improve the quality of care delivered. The preventive medicine physicians that graduate from the supported programs contribute to HRSA’s mission to improve health and achieve greater health equity through access to quality services, a skilled health workforce, and innovative programs. The residents who complete the program tend to practice in and lead local health departments and go on to serve as medical directors in health centers; they help bridge the incorporation of public health into primary care, bringing a population health approach to managing the health services in the community.