2015 ANNUAL REPORT



South Carolina Area Health Education Consortium

Building and Supporting the Healthcare Workforce South Carolina Needs



Executive Director's Report



Dr. David Garr, Executive Director, South Carolina AHEC

ntroducing the 2015 South Carolina AHEC annual report provides me the opportunity to highlight the accomplishments of our AHEC system during the past year. The dedicated members of our AHEC team working in Charleston, Florence, Greenville, Lancaster and Walterboro continue to do marvelous work, and it is a privilege to share with you some of their notable achievements. The South Carolina AHEC exists to help address the health workforce needs in our state, and we certainly cannot succeed in achieving this goal without the valued partnerships with many individuals and organizations across the state.

Health Careers Program

The Health Careers Program (HCP) was established to help build and support the health professions pipeline. The work we are doing with high school and college students is designed to provide guidance and encouragement to those who would like to enter the healthcare field. The longitudinal Health Careers Academy for high school students is a novel program that has been well received and continues to grow in popularity. Each of the four AHEC centers is doing an excellent job working with students and their families to provide information, guidance, encouragement and mentoring to help these students understand what it will take to become and gain admission to the health professions training program of their choice. The Bench to Bedside Program provides a monthly seminar and additional learning opportunities designed to help college students gain entry into their preferred educational program. The description of the work each AHEC center is doing to develop its unique HCP experience demonstrates their desire to provide engaging, enriching opportunities for the students in their region.

The U.S. National Library of Medicine (NLM) - funded Health Information Literacy Project continues to be well received and offers an exciting opportunity for students. The presentations the students made at the NLM headquarters in Bethesda, Maryland, and the red carpet event generated enthusiastic praise. The success of this program and another NLM-funded project at MUSC led to a large grant from the NLM to the National AHEC organization to disseminate these two model programs elsewhere in the country. This grant would not have been possible without the leadership and dedication of the students and faculty who have worked together on these two successful NLM-funded initiatives.

Health Professions Student Programs

The Health Professions Student Program (HPS) works closely with health professions educational programs across the state to provide excellent, community-based clinical learning experiences for health professions students. There is a great need for more healthcare in rural and under-served communities and the AHEC HPS program works to place students in these settings so they can experience first-hand the gratification that comes from serving those who reside in these communities. The HPS staff in the AHEC centers has been gratified to see some of these students return to these communities upon graduation from their programs.

There is an increasing emphasis on interprofessional education and interprofessional practice at the national level, and several of the academic programs in South Carolina have identified interprofessional education and practice as high priorities. Our AHEC system is working with the faculty in these programs with a goal of providing learning opportunities for interprofessional collaborative practice to students during their community-based rotations in the AHEC regions. In addition, the Institute for Primary Care Education and Practice is working to support students with an interest in primary care. The funding from The Duke Endowment for the Institute has ended, but the academic programs in advanced practice nursing, medicine, pharmacy and physician assistant studies are now supporting the participation of their students in the Institute for the 2015-2016 academic year and hopefully for many years to follow.

Continuing Professional Development

Another important component of our AHEC system is the provision of educational content to the front line health professions workforce across the state. Continuing Professional Development is critical if the healthcare workforce is to remain up-to-date with current developments. Increasingly, the healthcare workforce in the state is turning to

the South Carolina AHEC continuing professional development programming available through AHEC U and the SCHOOLS network to learn about the current developments in their fields. Our AHEC is using the newest technology to provide this educational content to health professionals and to patients. In partnership with MUSC, the South Carolina AHEC has established the Office for Telehealth Education which is designed to increase access to a wide range of learning resources.

Office for Healthcare Workforce Analysis and Planning

The Office for Healthcare Workforce Analysis and Planning (OHW) was established in 2009 to monitor the supply and demand for healthcare providers in South Carolina. The OHW, through its publications and consultations, is providing valuable services to many individuals and organizations across the state. The Duke Endowment funding that helped establish and sustain the office is ending, and meetings are underway with members of the South Carolina legislature with a goal of securing long-term state funding to sustain the work of this office for years to come.

Graduate Medical Education

There is a need for more physicians to provide healthcare in rural and under-served communities. The South Carolina AHEC works closely with the family medicine residency training programs in the state with the goal of retaining their graduates in South Carolina. The Resident Scholarship Symposium and the Family Medicine Interest Day are designed to help achieve this goal. In addition, the AHEC staff arranges bi-monthly meetings with the leaders of the eight family medicine residencies. These meetings afford them the opportunity to share information with one another and helps sustain a spirit of collaboration between the residency programs.

Recruitment and Retention

A high priority for the South Carolina AHEC is to assist with the recruitment and retention of healthcare professionals in the state. The Rural Physician, Rural Dentist and Locum Tenens Programs are all having a positive impact on the provision of healthcare services for rural populations.

Telehealth

Access to specialty services for patients residing in rural communities has been a challenge. The South Carolina AHEC is working closely with telemedicine initiatives across the state with the goal of increasing access for patients to specialty consultations without requiring the patients to leave their local communities.

In summary, the dedicated members of the staff in the AHEC centers and program office are providing a wide range of services for the state. Our important, valued partnerships with other organizations have been critical to the success that we have achieved. As we look to the future and recognize the healthcare system is in the midst of significant changes, our AHEC system is committed to working with our partners to build and sustain the healthcare workforce our state needs.

Mid-Carolina CNA Course -

This past summer Mid-Carolina AHEC partnered with Westwood High School to offer graduating Health Careers Academy seniors the opportunity to take a Certified Nursing Assistant course. The course was taught at Westwood High School by Amanda Ashley, RN. There were eight students who participated in the two-week course that included 60 hours of classroom instruction and 40 hours of clinical instruction. Upon successful completion of the classroom curriculum, students received clinical experience at Rice Estate, an independent and assisted living, rehabilitation and healthcare facility in Columbia. Students were able to practice the nursing assistant skills they had learned in the classroom. At the completion of their experience, students were able to take the South Carolina Certified Nursing Assistant Exam. Mid-Carolina AHEC is proud to report that all students

passed the exam! In the future, Mid-Carolina AHEC anticipates offering more CNA courses to students who meet certain requirements.



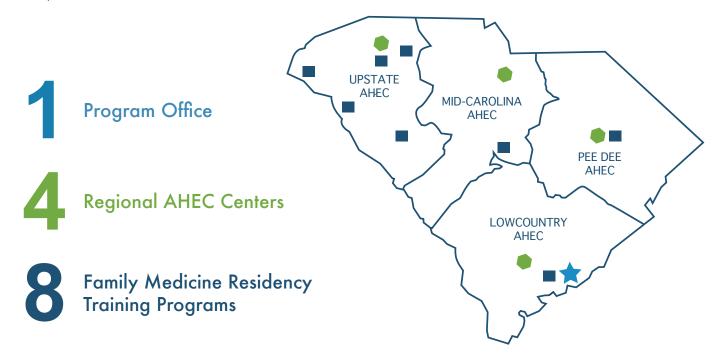
Completing the CNA program through AHEC was one of the best decisions that I could have made moving forward with my career in the healthcare field. Although it required much time and dedication, it was well worth it, providing me the chance to enhance my knowledge within an intimate and organized setting.... With the encouragement of the facilitator, Amanda Ashley, and my AHEC coordinator, Erica Davis, I persevered and am now able to call myself a Certified Nursing Assistant.

-Vanessa Harris, CNA

The South Carolina AHEC System

The South Carolina AHEC is committed to being a leader in building a collaborative educational system designed to optimize the health of South Carolinians by achieving excellence in healthcare through recruitment, retention and education of healthcare professionals.

The essential role of AHEC programs in the United States is to recruit, train, sustain and inspire a broad range of health professionals to practice in under-served communities in order to maintain a high quality healthcare safety net. South Carolina is a state that is disproportionately poor, rural and under-served relative to the rest of the United States. Therefore, the role of the South Carolina AHEC is crucial for training and retaining the next generation of healthcare professionals.



SCHOOLS Locations



The South Carolina Health Occupations Outreach Learning System (SCHOOLS) is a videoconferencing system that permits access to educational programs, health professions student rotation support and research initiatives. Programs, trainings and meetings are delivered to SCHOOLS locations over a high-speed, dedicated broadband highway known as the Palmetto State Providers' Network (PSPN). The network of SCHOOLS locations and programming continues to grow with more locations coming online.

Allendale County Hospital
AnMed Health
Beaufort Memorial Hospital
Cannon Memorial Hospital
Carolina Pines Reg. Medical Center
Claflin University
Clarendon Memorial Hospital
Clemson University
Coastal Carolina University
Edgefield County Hospital
Fairfield Memorial Hospital
Francis Marion University
Greenville Health System

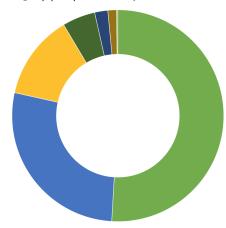
KershawHealth
Laurens County Memorial Hospital
Lowcountry AHEC (Walterboro)
Mary Black Health System- Gaffney
McLeod Loris
McLeod Seacoast
McLeod Medical Center Darlington
Mid-Carolina AHEC (Lancaster)
Midlands EMS
Newberry County Memorial Hospital
North Greenville Hospital
Pee Dee AHEC (McLeod Florence)
Pee Dee Regional EMS

Roper St. Francis Healthcare South Carolina AHEC (MUSC) Southern Palmetto Hospital- Barnwell The Regional Medical Center Tidelands Health Georgetown Tidelands Health Waccamaw Upstate AHEC (Greenville) Upstate EMS Council Wallace Thomson Hospital Winthrop University

FY 2015 Funding

State Funding—

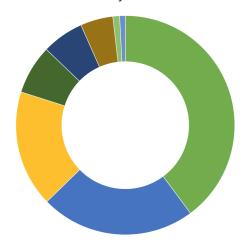
Funding appropriated by the state for the South Carolina AHEC totaled \$9,952,642.



- **\$5,068,648** Family Medicine Residency Training Programs
- **\$2,743,892** Regional AHEC Offices
- **\$1,288,494** Program Office
 - **\$500,000** Rural Physician Program
 - **\$200,000** Office for Healthcare Workforce Analysis & Planning
 - **\$131,608** Family Medicine Project Development
 - **\$20,000** Nursing Recruitment

External Funding -

Extramural funding for the South Carolina AHEC totaled \$1,023,716. Funding reported here spans periods across calendar and fiscal years.



- **\$408,000** AHEC Point of Service Maintenance & Enhancement Award Formerly Model AHEC (DHHS*, HRSA*)
- **\$233,978** Increasing the Primary Care Workforce (The Duke Endowment)
- \$176,101 Rural Dentist Loan Repayment Program (MUSC)
 - **\$74,295** Wellness Connect Obesity Management

(MUSC Center for Telehealth)

- **\$63,312** Geriatric Education Center (USC)
- **\$49,317** Health Information Literacy (U.S. National Library of Medicine)
- **\$10,193** Telehealth Education Programs (MUSC Center for Telehealth)
- **\$8,520** Tri-State Telehealth Advancement Network (USC)

Contractual Funds

Contracts with the South Carolina Department of Health and Human Services totaled \$1,061,343.

- **\$544,251** Locum Tenens (SC DHHS*)
- **\$517,092** Rural Physician Program/Rural Dentist Program (SC DHHS*)

Continuing Initiatives-

The funding (reported in previous fiscal years) for these initiatives is concluding but the programs will continue.

- Office for Healthcare Workforce Analysis & Planning (The Duke Endowment) (1/1/2015-12/31/2015)
- Bench 2 Bedside Program (The Duke Endowment) (11/13/2014-12/31/2015)
- Increasing the Primary Care Workforce (The Duke Endowment) (7/1/2014-6/30/2015)

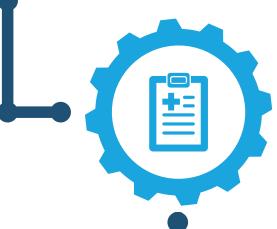
South Carolina AHEC Program Areas

The South Carolina AHEC builds and supports the healthcare workforce South Carolina needs through a focus on recruiting, retaining and educating healthcare professionals. This is done through a variety of programs, starting with students in high school and progressing through college, health professions training programs and graduate medical education. Then, once providers are practicing professionals, programs support the recruitment and retention of providers, as well as continuing professional development and access to education and services via telehealth. Finally, the Office for Healthcare Workforce Analysis and Planning looks at healthcare workforce needs and trends to inform decision-making statewide.



Health Careers Programs

address the need to increase the number of young people, especially those from underserved populations, who aspire to become healthcare professionals by promoting academic preparation and motivation for high school and college students through year-long and summer programs.



Health Professions Student Programs

provide opportunities for students to work and learn in rural and under-served communities in South Carolina by gaining real-world experience in patient care settings. These experiences increase the likelihood they will choose to practice in communities in need of healthcare services.

Graduate Medical Education

provides support for Family Medicine residency training programs in eight South Carolina communities. More than 50% of all family physicians in South Carolina were trained in AHEC-affiliated residencies.





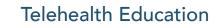
Recruitment and Retention Programs

provide financial incentives to physicians, dentists and advanced practice providers to practice in rural and under-served communities and the Locum Tenens Program provides coverage for physicians in rural areas, allowing them time away from their practices.



identify the needs of healthcare professionals and provide education programs designed to enhance clinical skills and maintain professional certifications. Programs are delivered through traditional methods and innovative technologies.







provides new access for students, providers, patients and communities through telehealth technology. Telehealth extends AHEC's statewide reach and partnerships to address rural healthcare delivery and healthcare workforce development needs.

Office for Healthcare Workforce Analysis and Planning

provides timely information that individuals, communities, educational systems, state agencies, health systems and others can use for planning and decision-making about South Carolina's healthcare workforce.



Key Result Areas

Health Careers Programs



9,294

Hours of health professional shadowing time provided to 764 HCP high school participants at healthcare facilities statewide.

2,371

Hours of HCP service-learning activities completed by high school students across the state.

Health Professions Student Programs



278

Clinical facilities served as training sites for 970 health professions student placements.

118,344

Patient contacts for health professions students provided through the teaching of 450 preceptors.

Graduate Medical Education



209

Residents-in-training (68 graduates) in the eight Family Medicine Residency Training Programs last year

50

Approximate percentage of all family physicians in South Carolina trained in an AHEC-affiliated residency training program.

Recruitment & Retention



Rural dentists and 14 faculty members in MUSC's College of Dental Medicine have received loan repayments from the Rural Dentist Program since its inception in 2005.

Days of locum tenens services provided to physicians in rural and under-served areas of South Carolina in 2015.

Professional Education



82,080

Contact hours of continuing professional education provided to assist professionals in maintaining their licenses and certifications.

38,309

Health professionals took advantage of AHEC educational programs.

Telehealth



- Primary care practices linked with experts at the MUSC Weight Management Center for the Wellness Connect telehealth weight management program.
- Topic areas delivered through innovative partnerships in the areas of pediatrics, emergency services, infectious disease, pharmacology, neurodevelopmental disorders, hypertension, geriatrics and team-based care.



Health Careers Program

The South Carolina AHEC Health Careers Program (HCP) provides a variety of extended learning opportunities for students to support their matriculation into health professions training programs. HCP initiatives promote the development of academically-proficient and self-confident future healthcare professionals. The Health Careers Academy (HCA), the flagship of the HCP, serves students in grades 9-12 in the four AHEC regions. HCP coordinators facilitate educational programs and activities during the academic school year for these students. Service-learning, mentoring and academic advising are components of the curriculum, which aligns with the South Carolina Department of Education Academic Standards.

Highlights -

Health Careers Academy

Health Careers Academy fellows participate in four years of programming, including sessions and activities that promote academic success, career development and personal growth. One-on-one mentor and parental involvement are also major components of the HCA. Completion of the HCA prepares participants for the academic challenges of pre-health training programs. Students are recognized for their participation in HCA activities:

- 71 Achiever Students (110+ hours of HCA activities)
- 70 Scholar Students (60+ hours) and
- 84 Junior Scholar Students (20-59 hours)

Bench to Bedside

The Bench to Bedside program, originally funded by The Duke Endowment in 2011, continues to promote the matriculation of undergraduate students into health professions education programs. The B2B program includes:

- Partnerships with Claflin, Coastal Carolina, Clemson, Francis Marion, South Carolina State & Winthrop Universities
- Statewide Student Success Seminar Series via the SCHOOLS videoconference network
- Biology 121 & 122: Introduction to Health Professions courses from Winthrop University offered to B2B partners
- Student-organized B2B club founded at Winthrop University to expand pre-health development activities
- 749 participant hours of B2B programming during the 2014-2015 academic year

Summer Careers Academy

The South Carolina AHEC Summer Careers Academy is designed to increase the acceptance, retention and graduation rates of under-represented minority and disadvantaged students to health career training programs in South Carolina. The Academy is conducted in collaboration with the MUSC College of Dental Medicine, College of Health Professions, College of Medicine, College of Nursing, Library and the South Carolina College of Pharmacy (MUSC campus) and are generally held during the first week of June. Thirty-six students attended this year's Academy, representing 14 South Carolina counties and two other states.

Lowcountry AHEC Pipeline Connects

This past year, Lowcountry AHEC's Health Careers and Health Profession Student (HPS) Programs continued to collaborate on the Lowcountry AHEC Pipeline Connects project. The goals of the program are to incorporate HCA students into HPS activities, to create activities that will allow HPS students to model healthy behaviors to HCA and middle school students and to develop methods for utilizing HPS students as peer mentors. The overarching goal is to increase the number and diversity of the healthcare workforce. This program provides an opportunity for HPS students to practice working as an interprofessional team, while exposing the HCA and middle school students to healthcare professions. An immediate outcome is to increase interest and recruit middle school students into the HCP program at Lowcountry AHEC. Ultimately, Lowcountry AHEC aims to recruit middle school students into the HCP program and therefore increase the number of HCP students being accepted into health careers programs and becoming health professionals. The program is on track to meet its goals, with ten HPS students and 35 HCA and middle school students participating during last year's activities.

To read more about what the South Carolina AHEC Health Careers Program is up to, check out the **Health**Information Literacy Project on the next page and the HCP Summer Internship Highlights section on page 11.



The South Carolina AHEC partnered with the U.S. National Library of Medicine (NLM) and three lowcountry high schools for a health information literacy project. High school students were charged with researching public health themes and creating educational comic books geared toward middle school students. In the process, the high school students learned about helpful resources from the NLM, gained valuable communication, research and creative skills, increased their knowledge about health careers and improved their health literacy.

Acquisition of health information literacy skills begins early in life and is part of the learning process for educating children, adolescents and young adults. Research shows that low health literacy levels correspond with a number of poor outcomes, including increased likelihood of chronic conditions and skipping preventive health measures. While technical knowledge and competencies are integral components of almost every program of study, many curricula are not adept at instructing students in the development of social skills and competencies that are particularly valued in health careers.

Students from the three schools worked to produce the four inaugural editions of AHEC Comics. Colleton County High School students and Lowcountry AHEC partnered to create "The Expert Investigators," a book about the public health implications of an Ebola outbreak. Lowcountry Leadership Charter School students worked in a two-semester class to produce two books: "Prescription Strength," a book about anabolic steroid abuse and "Choosing the Way," a book about childhood obesity and healthy lifestyle choices. Finally, North Charleston High School students, in partnership with the Raise Up mentoring program, created "Coast in Crisis," a book about earthquake preparedness and emergency response procedures.

During the school year the students attended workshops at the South Carolina AHEC Program Office where they learned valuable interviewing techniques and story writing skills, as well as tricks of the trade for good design and production. The students also became more proficient in determining the credibility of health information found on the Internet. Prior to the creating their storylines, the students interviewed healthcare professionals and other relevant experts to gather first-hand insight into their topic areas. In early April, two student representatives from each school, along with two school liaisons and several members of the South Carolina AHEC, traveled to

the U.S. National Library of Medicine near Washington, D.C. to present the project and share a sneak preview of a book with the NLM director and staff.

Students celebrated the launch of their books during a red carpet event at MUSC in April. Year two of the South Carolina AHEC health information literacy project will include three more comic book projects from students at the three participating high schools. Find out more at www.scahec.net/hcp/comic and be on the look out for the next editions!

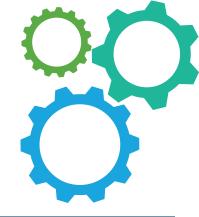
My experience working with the National Library of Medicine as a Lowcountry AHEC student on the literacy project was a truly life changing experience. I learned a lot about health literacy but most importantly I learned that no task is ever too hard. As long as you have a great foundation to build upon, anything is possible.

Octavia Hannah, Leading Author, The Expert Investigators





Summer Internship Highlights



Upstate AHEC Summer Program -

Upstate AHEC's Summer Enrichment Internship Program included a record number of students who were awarded six-week paid internships in a variety of healthcare settings throughout the Upstate region. Thirty-two high school and college participants were placed in host sites. They participated in a wide variety of critical job training experiences: nursing, information technology, human resources, dentistry and cancer research. Prior to placement in the internship program, students attended a mandatory job training workshop and internship orientation facilitated by Upstate AHEC and its regional partners: Upstate Circle of Friends Job Readiness Program, Workforce Investment Advisory (WIA) Youth Council and Personal Pathways of Success. At the conclusion of the internship program, each student was required to share a final visual or audio assessment of their summer experience.



The AHEC program was extremely valuable for me and my future. I intend to go into the medical field and...medical schools value clinical exposure because it allows prospective students to gain a sense of the environment of a hospital. The AHEC program allowed me to gain this exposure through volunteering... Using the opportunities that the AHEC program has given me, I have a better understanding of the environment of a medical facility.

-Venkat Kothandaraman

Former graduating senior from Southside High School in Greenville, accepted into the honors college at USC and started his freshman year in August 2015.

Pee Dee AHEC Summer Internship Program

The 2015 Pee Dee AHEC Health Careers Summer Internship Program was a great success. One participant was even offered a position with the internship site at the completion of the program. Each of the seven participating students worked in a healthcare facility in the Pee Dee region, learned about the healthcare industry and engaged in personal and professional development. This year's internship class included both high school and college students with a diverse set of career aspirations, including students striving to become nurses, physicians, occupational therapists and healthcare administrators. This summer's program included more students from Sumter and Clarendon counties than in years past and additional placement sites in Sumter and Lee counties.



The experience was absolutely amazing and very helpful for me to decide about my future in health careers.

-Courtney Brown, rising junior at Wilson High School, aspiring OB/GYN

Lowcountry AHEC



Cherokee Plantation, Yemassee, Colleton County (Photo by Jorge Ruiz)



The **Lowcountry Area Health Education Center** is a not-for-profit AHEC center, serving twelve southeastern counties in South Carolina. The counties of the service area are a continuum of rural to urban and the socioeconomic profile of the population is diverse, from very poor to very affluent, with education levels trending with socioeconomic status. With a large area at or near the I-95 corridor, the population health issues are typical of this area, including diabetes, heart disease and stroke. To combat these issues, Lowcountry AHEC staff have worked diligently during the past year providing programs to increase and diversify

the healthcare workforce, bringing health professions students into rural and under-served areas and delivering continuing education programs to more than 10,000 participants based on regional, state and national needs.

To address the stroke prevalence in the lowcountry, Lowcountry AHEC became one of only four Advanced Stroke Life Support (ASLS) Training Centers in South Carolina. In February, two health professionals were trained as ASLS instructors in Miami, Florida. The University of Miami Gordon Center for Research in Medical Education developed the course, which addresses the pre-hospital management of patients with acute stroke. Using interactive discussions, hands-on workshops, multimedia and standardized patients, the course includes a discussion of the differential diagnosis of stroke, rapid recognition of five major stroke syndromes and education regarding the use of thrombolytic therapy in acute ischemic stroke patients. To date, Lowcountry AHEC has held the ASLS training three times, with all 43 participants successfully completing the ASLS certification.

This past year, Lowcountry AHEC moved into its new office and training center at 87 Academy Road in Walterboro. The building is over 5,500 square feet with over a quarter of that dedicated to training and meeting space. The classroom and conference rooms are equipped with state of the art audiovisual and videoconferencing technology. The building has been planned for many years and after just six months of "living" there, Lowcountry AHEC is proud to call it home.



Health Professions Student Program

The South Carolina AHEC Health Professions Student (HPS) Program collaborates with health professions education programs in our state to provide community-based learning experiences for undergraduate and graduate students. These educational partnerships are designed to expose students to the realities of clinical practice in rural and underserved areas and provide them with opportunities to help address specific health needs in those communities. The South Carolina AHEC placements give students the opportunity to experience healthcare in a real world clinical setting away from their academic health science centers. Students are able to interact one-on-one with patients in community health centers, county health departments, homeless clinics, local practitioners' offices and other primary care sites. Students learn firsthand how economic, cultural and geographic barriers affect the provision of healthcare services and the specific needs of under-served and ethnically diverse populations.

Feature: Institute for Primary Care -

In an effort to further enhance the interest of health professions students in primary care, the South Carolina AHEC in 2012 established the Institute for Primary Care Education and Practice (IPC) at MUSC and the USC. With funding from The Duke Endowment, the Institute originally identified medical, advanced practice nursing and physician assistant students early in their training who have an interest in careers in primary care. Preceptors practicing in primary care settings with interprofessional teams were invited to participate in the IPC activities.

Now in its third year, the IPC continues to provide learning opportunities, support and guidance for an interprofessional group of students from MUSC and USC located in Charleston, Columbia and Greenville. The students apply to become fellows in the Institute, then attend monthly seminars from their respective locations using videoconferencing technology, are invited to an annual retreat and have additional opportunities for networking with preceptors and interprofessional courses and projects throughout the year.

In the spring of 2015, IPC fellows who had graduated or were preparing to graduate were given an exit survey asking about their experience with the IPC and plans for the future. Of the 21 students who responded, 100 percent indicated they were practicing or intended to practice primary care upon graduation.



IPC Fellows and Preceptors attend a networking event during the spring retreat

In the fall of 2015, the IPC welcomed its first pharmacy students from the South Carolina College of Pharmacy at MUSC. To date, 33 preceptors have joined the IPC, as well as four cohorts of students, including 100 fellows (MUSC: 38 medicine, 17 nursing, 3 pharmacy, 18 PA; USC: 15 medicine, 9 nursing).



I have always known that I want to enter primary care so I knew I wanted to join the Institute. I expected the Institute to provide me with academic opportunities and networking connections; in addition, friendships were built that confirmed my desire to work in primary care. In the spring semester, I was able to join IPC students from MUSC for a semester long class that culminated in a week-long practical at a practice in the Charleston area. One of the friends I made during that class has called from Charleston and supported my family as we watched the floodwaters rise in Columbia this fall. My family and house weathered the storm, but many families near us were less fortunate. She was there with a listening ear at the end of long days working in the community and cramming for a test over the weekend before classes went back into session. Other students helped reschedule a presentation to allow me the time I needed to focus here in Columbia. Clean up in Columbia will continue, but my desire to enter primary care as a physician is stronger and my love for the state of South Carolina has grown

because of the response of the fellows in the program. The IPC may have brought us together, but nothing will tear us apart.

-Elizabeth Baker, USC Medical Student, Class of 2018

Mid-Carolina AHEC



Rocky Shoals Tiger Lilies, Catawba River



Mid-Carolina AHEC's service area includes eleven counties in the center of the state bordering North Carolina and Georgia. As a predominately rural region, the center serves as an education pipeline for healthcare professionals and routinely works with regional partners to navigate the changing healthcare landscape associated with education, recruitment and retention. Mid-Carolina AHEC continues to develop and implement processes and programs that support improved healthcare delivery, especially in rural and under-served areas.

In 2015, Mid-Carolina AHEC continued its partnership with the South Carolina Annual HIV, STD and Viral Hepatitis Conference and the South Carolina DHEC to provide HIV/AIDS/STD educational opportunities and networking for health professionals statewide. The goal of this interdisciplinary conference is to provide opportunities for people living with HIV/AIDS to engage in dialogue, share past successes, discuss current practices and interventions, as well as address emerging issues and trends. In 2014, the two-day conference, *Enhancing Partnership: Stronger Together*, focused on bridging the gap between public health and primary care to improve HIV and viral hepatitis outcomes. The conference was attended by 435 participants, including 25 disciplines and offering eleven hours of educational credit. The conference included a pre-conference workshop Update for PLWHA (People living with HIV/AIDS), attended by 91 participants and offering 6 hours of educational credit.

In an effort to support faculty development for our regional health professions student preceptors, the Mid-Carolina AHEC provided all preceptors with two preceptor development books titled *The Physician As Teacher* and *Teaching in Your Office*. In addition, the Mid-Carolina AHEC provides article retrieval services for all preceptors. Mid-Carolina AHEC also partnered with the Edward Via College of Osteopathic Medicine – Carolinas Campus to host a faculty development program focused on student evaluations and patient scheduling for 13 physicians, 13 office managers, 13 nurses, one hospital CEO and one hospital CNO.

In conjunction with a National AHEC Organization project, the Mid-Carolina AHEC distributed an Affordable Care Act (ACA) Marketplace self-study module to 262 healthcare providers. These providers included primary care physicians, advanced practice professionals, pharmacists, social workers and physical therapists. Of those providers, 92 percent reported an increase in knowledge and 74 percent reported that they intend to make at least one practice improvement.



Graduate Medical Education

The South Carolina AHEC provides support for graduate medical education (GME) through a number of initiatives. The South Carolina AHEC works collaboratively with South Carolina's medical schools to educate and retain medical students in South Carolina for their graduate medical education. Every five years, the South Carolina AHEC conducts a graduate survey to ascertain Family Medicine graduates' demographics, training needs and practice experience. The results of these surveys are used to strengthen residency programs' curricula. In addition, AHEC works collaboratively to provide quality faculty development and networking opportunities for residency program faculty members.

Family Medicine Residency Training Program

In order to address the shortage and maldistribution of primary care physicians in our state, the South Carolina AHEC provides funding for and works closely with the statewide Family Medicine Residency Training Programs. Family medicine is the medical specialty that provides continuing and comprehensive healthcare for individuals and families. The family physician typically functions as the patient's point of entry into the healthcare system. The family physician is the first contact in most situations and, as the initial provider, evaluates the patient's total healthcare needs, provides personal care and guides the patient's use of the healthcare system.

Last year, South Carolina AHEC-affiliated programs trained 209 family medicine residents in eight residency program sites across the state. The South Carolina AHEC Family Medicine Residency Training Programs are located in Anderson, Charleston, Columbia, Florence, Greenville, Greenwood, Seneca and Spartanburg.

Highlights -

The USC School of Medicine partnered with Francis Marion University, Carolinas Hospital System and McLeod Regional Medical Center to open a training campus in Florence. Dr. William Hester was appointed as Assistant Dean for Medical Student Education – Florence. USC medical students are now able to spend part of their clerkship rotations at this new training site in Florence. Additionally, MUSC has partnered with AnMed Health to pilot a clinical education program that allows MUSC medical students to complete a variety of their third-year and fourth-year clinical rotations at AnMed Health.

In order to meet the growing primary care physician need in the more rural and under-served areas of northeast South Carolina, the Family Medicine Residency Program at McLeod Regional Medical Center has increased its class size to 9-9-9. It will take at least three years to recruit, educate and retain the extra residents. To enhance the rural track option, the program now requires a four-week rural rotation. In that time period, a second year resident is sent to designated sites under the supervision of a family physician preceptor. McLeod Family Medicine has affiliation agreements throughout the Pee Dee and Midlands regions with the expressed hope that the experience may make an attractive invitation for a future practice opportunity. The hospital has been very generous in supporting this initiative as it pertains to the residency and hospital mission.

In Memoriam: Dr. Marion Burton Passes

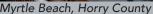


It is with great sadness that the South Carolina AHEC marked the passing of Olin Marion Burton, MD, in July. Dr. Burton was a friend and ardent supporter of AHEC as well as a dedicated physician who sought to improve access to care for people of all ages in our state and beyond. His leadership and lasting impact on health and healthcare in South Carolina cannot easily be enumerated. Dr. Burton practiced pediatrics in Anderson for two decades, served as a faculty member and subsequently as Director of Pediatric Education and Associate Director of the Anderson Family Medicine Residency Training Program, as well as serving on the Board of the South Carolina AHEC Rural Physician Recruitment Program for 21 years and as Chair for 13 years. Dr. Burton established a Division of Community Pediatrics at the USC School of Medicine and established the South Carolina AHEC locum tenens program in 1994 and was its Medical Director for 21 years. Dr. Burton's

contributions were instrumental in strengthening the retention rates of practitioners in rural South Carolina and his work with the Rural Physician program has resulted in over 394 primary care physicians being placed in rural and under-served areas of our state. He was an integral part of the South Carolina AHEC system for 41 years and he will be greatly missed.

Pee Dee AHEC







The **Pee Dee AHEC** office is centrally located in Florence to serve its 12-county service area in the rural northeastern section of South Carolina known as the Pee Dee region. Much of the population in the Pee Dee region is rural and under-served with a significant portion of the population being uninsured or under-insured. Diabetes, hypertension, coronary heart disease and stroke are all prevalent conditions especially along the I-95 corridor.

The Pee Dee AHEC continuing professional development program takes great pride in the educational offerings provided to healthcare professionals in the region. Participants gain a wealth of current information and knowledge to utilize when providing quality patient care. Numerous nursing certification programs were offered as many regional hospitals are in pursuit of Magnet status. Pee Dee AHEC also worked with regional rehabilitation therapists to provide several orthopedic and neurological programs, including both didactic and clinical components, to address their educational needs.

Pee Dee AHEC's Health Careers Program serves as a pipeline to bring high school and undergraduate students together for health career exploration and summer work experiences. The high school students participated in a seven-month Health Career Academy (HCA), which allowed them to earn .5 unit Carnegie Credit. Pee Dee visiting health professions students also served as guest lecturers to the HCA participants. In collaboration with Darlington County School District, the health careers program offered programming designed to improve college and employment readiness skills for students in the Workforce Investment Act (WIA) after school program.

With an increasing number of health professions education programs located in the Pee Dee, the HPS coordinators recruited additional clinical preceptors and training sites across the region to meet the demand. These community-based learning experiences provided the medical, physician assistant and nurse practitioner students with firsthand knowledge about clinical practice, economic and cultural barriers and the specific needs of the under-served and ethnically diverse patient populations.

The National AHEC Organization (NAO) has selected Pee Dee AHEC as the state entity for the NAO National Training Center Human Papillomavirus (HPV) project in collaboration with the Centers for Disease Control and Prevention. The goal of this partnership is to increase the HPV immunization rates by improving clinical training and understanding of the vaccine.



Recruitment & Retention

The South Carolina AHEC has been committed to the recruitment and retention of healthcare professionals in the state through initiatives that have been ongoing and evolving for more than 40 years.

Rural Physician Program

The South Carolina AHEC Rural Physician Program was initiated by the South Carolina Legislature in 1989 to address the under-supply of clinicians in rural and under-served South Carolina communities. The program provides incentive grants for primary care physicians who commit to practice in a Health Professional Shortage Area (HPSA) for at least three years. In FY 2015, 16 physicians, four nurse practitioners and two physician assistants received funds from the Rural Physician Program. To date, 394 physicians and 56 advanced practice providers have been funded.

Rural Dentist Program

The Rural Dentist Program was established by the South Carolina Legislature in July 2005. The program assists with the repayment of educational loans for dentists who agree to practice in a HPSA or serve as a full-time faculty member in the MUSC College of Dental Medicine. Four rural dentists and three MUSC dental faculty were funded by the Rural Dentist Program in FY 2015.

Locum Tenens

The Locum Tenens Program is a collaborative effort between the South Carolina AHEC, USC School of Medicine and the South Carolina Department of Health and Human Services. This program is designed to support the practices and increase the retention of family practitioners and pediatricians in rural South Carolina by providing them with the opportunity for vacation and family time, continuing professional development conferences, or for other reasons that would require providers to be absent from their practices. Faculty from three of the South Carolina AHEC Family Medicine Residency Training Programs and a pediatrician from the USC School of Medicine provide Locum Tenens coverage for the state.

Highlights -

Fifty-two residents attended the South Carolina AHEC Residents' Scholarship Symposium in June. This meeting provided a unique opportunity for residents from all specialties to submit proposals to present research papers on basic research or quality improvement projects. A Chief Residents' Conference was also held at this meeting and residents received instruction on how to be effective chief residents and clinical teachers. This meeting was held in conjunction with the South Carolina Academy of Family Physicians' annual meeting.

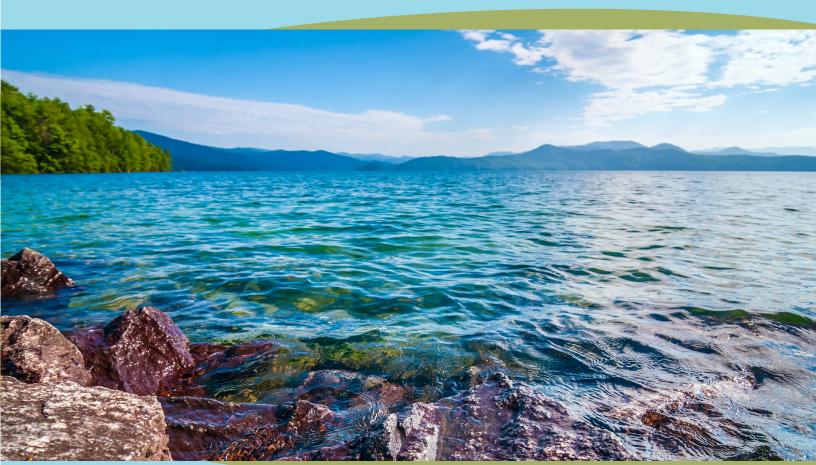
In August, 81 medical students from MUSC, USC School of Medicine, the University of South Carolina School of Medicine Greenville, the Edward Via College of Osteopathic Medicine – Carolinas Campus and five other medical schools attended the 2015 Rebecca S. Seignious Family Medicine Interest Day. Students participated in hands-on workshops provided by the South Carolina Family Medicine Residency Programs' faculty and residents as well as a recruitment fair hosted by the residency programs.

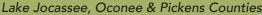


Thank you so much for accepting me into your Rural Dentist Program. You have no idea what a help and answered prayer your assistance is. With your aid, I can actually see a light at the end of the tunnel in getting out of debt and can better relax and treat my patients. You provide such a great service to us South Carolina dentists in many ways and I am forever grateful.

-Jessie Suggs Robinson, DMD Clemson Class of 2009 MUSC Class of 2014

Upstate AHEC



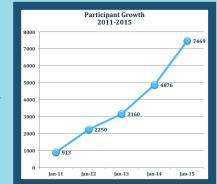




2015 marked one year for **Upstate AHEC** in its new building. The new facilities and their location in the Patewood area of Greenville provided an excellent backdrop for Upstate AHEC to focus on the continuing professional development of healthcare personnel, assistance to students in health professions education and recruitment of high school students for a future in healthcare for its eleven-county region. Upstate AHEC is especially excited to utilize the increased capabilities of the building's training room. During the first 12 months in the new building, Upstate AHEC offered 35 live programs and hosted 699 participants utilizing the new space.

Growth of AHEC U, the web-based distance learning program for healthcare professionals statewide, was a highlight of Upstate's growth during the past 12 months. Across South Carolina, healthcare professionals completed almost 7,500 on-line courses to gain knowledge and for re-licensure requirements. Throughout the Upstate AHEC region, 1,900 professionals attended live continuing professional development programs representing almost 12,000 participant hours.

Phenomenal interest in Upstate high school health career programs resulted in a 300 percent surge in the number of students attending the Health Careers Academy during the academic year. Summer internship placements and scholarships increased to 34, doubling in size over the previous year.



Partnerships with Clemson University's nursing faculty to create on-line training, participation in MUSC's Southern Lung Cancer Study and collaboration with the South Carolina Leadership Education in Neurodevelopmental and Related Disabilities (LEND) program, also sponsored by MUSC, capped an exceptional year for Upstate AHEC.



Professional Education

The South Carolina AHEC supports healthcare excellence throughout the state by offering educational programs to the state's many healthcare professionals. Programs provide knowledge and updated information to healthcare professionals across multiple disciplines so they can provide the best possible care to patients.

Highlights -

Mid-Carolina School Nurse Workshop

In partnership with Upper Midlands Rural Health Network, Catawba Mental Health, Old English School District and Chester Healthcare Foundation, Mid-Carolina AHEC hosted its annual school nurse workshop. The workshop, The Mental Health of Children, Adolescents and Their Families, focused on the behavioral health of students. Sixty-seven participants attended the workshop and continuing education credit was provided to nurses, counselors, therapists and social workers. Ninety-four percent of responding participants reported an increase in knowledge and 98 percent plan to implement at least one practice improvement.

Pee Dee AHEC Programs

Pee Dee AHEC partnered with a local advanced practice registered nurse (APRN) group from the Florence area to continue a popular APRN series of educational programs. Seven live programs broadcast statewide via the SCHOOLS videoconference system were attended by nearly 60 participants and resulted in recordings that are available as enduring professional development material. Cumulatively, 100 percent of participants who completed either a live or enduring APRN course indicated both an increase in knowledge and the intent to implement at least one practice improvement.



The STABLE class offered by Pee Dee AHEC will help build on the neonatal skills I learned in NRP [neonatal resuscitation program] class. I think the information provided in the STABLE class will help me provide a superior quality of patient care to the neonatal population during air medical transport. I would highly recommend that my colleagues at Air Reach take the STABLE class to expand their neonatal knowledge. Thank you for allowing Air Reach to attend your class.

-Brian McCoy, FP-C, Flight Paramedic, Air Reach, McLeod Regional Medical Center

AHEC U

AHEC U, the web-based distance learning system administered by Upstate AHEC, made the largest growth leap in its five-year history with a 35 percent increase in participation. With an initial offering of 29 on-line courses in 2010, today AHEC U has:

- Nearly 200 web-based courses targeted to a wide variety of healthcare professionals
- Issued almost 7,500 AHEC U course certificates to professionals statewide during the past year
- Provided more than 10,250 participant hours of education.

South Carolina Health Occupations Outreach Learning System (SCHOOLS)

SCHOOLS added a new programming series during the year focusing on pre-hospital care for patients. The EMS Case Presentations series creates an ongoing dialogue between trauma, cardiology and neurology physicians and the pre-hospital emergency management providers who provide initial care and transport. The resulting potential for quality improvement and rapid transfer of knowledge and updated protocols based on research developments is significant and data regarding outcomes are still being gathered. The programs are available statewide via videoconference and as enduring on-demand programs. Statewide EMS credit through DHEC is available for both live and enduring programs and nursing credit is available for the live programs from Lowcountry AHEC. Three regional EMS offices (Mid-Lands, Pee Dee and Upstate) joined the SCHOOLS network during the summer of 2015 and will be participating sites for these and other trainings in the future. SCHOOLS also continues to expand its programming and saw more than 460 registrations accruing more than 740 participant hours and counting.

Wellness Connect: Telehealth Weight Management

The Wellness Connect Telehealth Weight Management program successfully launched in January 2015 at four primary care practices across the state. The program, with funding from The Duke Endowment and the MUSC Center for Telehealth, is a partnership between the South Carolina AHEC, MUSC Weight Management Center and family medicine practices to provide expanded access to an interprofessional team of weight loss experts at MUSC. The four-month program allows individuals to conveniently participate in a weight loss program from their primary care provider's office.

Over 50 South Carolina patients participated in the first two cohorts from the first four practices across the state. Four more practices joined the program for the third cohort of patients:

Initial Participating Practices

Dr. Hugh Durence, James Island Dr. Ed Evans, Seneca Dr. Oscar Lovelace, Prosperity Dr. Dale Padgett, Bamberg

Additional Participating Providers

Dr. Gaye Douglas, Kingstree
Dr. Neil Shealy, Varnville
Dr. Same Stone, Chester
Dr. Adrianne Westmoreland, Williamston

Results from the first two cohorts of patients are statistically significant (over 4% average weight loss by participant) and comparable to the results from in-person weight management sessions conducted by the MUSC Weight Management Center. Wellness Connect is a great example of AHEC's commitment to supporting primary care providers in communities across the state with access to healthcare services and expertise that is often locally in short supply.



Lowcountry AHEC Interconception Project



Lowcountry AHEC is partnering with Palmetto Health Richland Perinatal Systems, the USC Arnold School of Public Health and Family Solutions of the Low Country (formerly Low Country Healthy Start) to design, implement and evaluate education to improve the interconception health (health of women in the time between pregnancies) of Family Solutions of the Low Country clients. The partners are designing health education modules to complement and improve the education already in place. The purpose of this project is to examine the effect of "train-the-trainer" modules on the improvement of the interconception health of the women.

The first phase of the study used the *Nutrition in Pregnancy and Postpartum* module to provide skills and information to the client navigators to enable them to instruct clients about improving their health during the time between pregnancies. The client navigators then educated 100 randomly selected post-partum African American women from rural Allendale, Bamberg, Barnwell, Hampton and Orangeburg counties using the knowledge and skills they had learned from the module.

The first train-the-trainer evaluation results were very positive, with 100 percent of client navigators stating that as a result of this course they will make a change in their practice. Pre/post-test results also showed that trainer knowledge increased by 30 percent. The project also measured changes in BMI, knowledge and food diary scores of the women served by the client navigators. Results showed that there was an average decrease in weight of nearly 4 pounds and decrease in BMI of more than 2 percent in clients after completing the first module.

After such positive feedback and results from the first module, Lowcountry AHEC looks forward to the continuation of this successful program. The second module will be *Obesity in Pregnancy*, including diabetes and hypertension management.

Virginia Berry-White, MSW, Director of Family Solutions of the Low Country, echoed the positive impact of the program for the client navigators and clients themselves, "I believe participants will be more proactive when it comes to taking care of their health. I see improved lifestyle changes."



Office for Healthcare Workforce Analysis & Planning

The Office for Healthcare Workforce Analysis and Planning (OHW) is dedicated to studying issues that affect the available supply of healthcare providers in South Carolina. Its primary mission is the development, analysis and distribution of accurate, reliable information about the healthcare workforce in South Carolina to support planning and policy decisions in order to ensure that the citizens of the state have the number and types of healthcare providers they need in the future. OHW reports, policy briefs, data briefs and maps can all be downloaded free of charge from the website: www.officeforhealthcareworkforce.org.

Highlights -

Information made available by the Labor Market Information Office in the South Carolina Department of Employment and Workforce identifies the fastest-growing nursing and allied health fields in South Carolina. Based on information gathered by the federal Bureau of Labor Statistics in 2012, they estimate the expected number of job openings in 2022. The count of anticipated annual openings include those due to growth (new jobs) and those created when people leave the workforce through retirement, career change, or other reasons (replacements). The table below, organized according to the total number of anticipated annual openings, summarizes the 20 fastest-growing occupations.

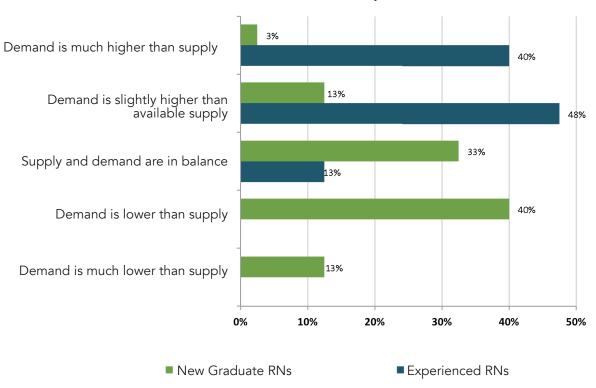
| Allied Health Occupations | LMI/BLS Job Estimates 2012-2022 | | | Total % | Average |
|---|------------------------------------|----------------|-----------------|---------|--------------------|
| | Actual 2012 | Estimated 2022 | Total Change | Change | Annual Openings |
| Registered Nurses | 43,687 | 51,936 | 8,249 | 18.9 | 1,672 |
| Nursing Assistants | 19,028 | 23,213 | 4,185 | 22.0 | 780 |
| Home Health Aides | 10,731 | 15,722 | 4,991 | 46.5 | 703 |
| Licensed Practical and Licensed Vocational Nurses | 9,778 | 12,088 | 2,310 | 23.6 | 470 |
| Medical Assistants | 8,141 | 10,394 | 2,253 | 27.7 | 380 |
| Emergency Medical Technicians and Paramedics | 5,126 | 6,162 | 1,036 | 20.2 | 244 |
| Pharmacy Technicians | 6,195 | 7,481 | 1,286 | 20.8 | 190 |
| Dental Assistants | 3,337 | 4,194 | 857 | 25.7 | 155 |
| Dental Hygienists | 2,515 | 3,393 | 878 | 34.9 | 152 |
| Medical and Clinical Laboratory Technologists | 3,437 | 3,910 | 473 | 13.8 | 137 |
| Medical and Clinical Laboratory Technicians | 2,454 | 3,175 | 721 | 29.4 | 136 |
| Medical Records / Health Information Technicians | 2,730 | 3,372 | 642 | 23.5 | 136 |
| Radiologic Technologists | 3,393 | 4,104 | 711 | 21.0 | 119 |
| Orderlies | 2,662 | 3,185 | 523 | 19.6 | 103 |
| Surgical Technologists | 1,836 | 2,386 | 550 | 30.0 | 73 |
| Physical Therapist Assistants | 1,061 | 1,460 | 399 | 37.6 | 64 |
| Massage Therapists | 1,785 | 2,166 | 381 | 21.3 | 57 |
| Veterinary Technologists and Technicians | 1,295 | 1,692 | 397 | 30.7 | 53 |
| Phlebotomists | 1,236 | 1,508 | 272 | 22.0 | 51 |
| Cardiovascular Technologists and Technicians | 1,090 | 1,420 | 330 | 30.3 | 48 |

Note: There is no direct relationship between the total percentage change expected for a particular group and the average number of job openings expected

Similar information about other health professions, and how the annual number of graduates from South Carolina health profession education programs compares to these job forecasts, can be found on the Office for Healthcare Workforce website: www.officeforhealthcareworkforce.org.

A recent OHW study of the nursing workforce in South Carolina hospitals, completed in collaboration with the USC College of Nursing, shows that recruitment of registered nurses (RNs) is becoming more difficult – especially for experienced RNs (see the chart below). Chief nursing officers in South Carolina acute-care hospitals were asked to assess their local labor market for nursing personnel and to describe how their nursing workforce needs are changing. Eighty percent of eligible hospitals responded to the survey. A significant number of hospitals expect employment levels to increase for different types of nurses during the coming year: 50 percent expect to add new jobs for nurse practitioners; 40 percent expect to add new staff RN positions and 40 percent expect to add new jobs for nurse aides and assistants. Between 10 and 27 percent of hospitals also expect to add jobs for nurse midwives, certified registered nurse anesthetists, managers and administrators, nurse educators, clinical nurse leaders and clinical nurse specialists. Only licensed practical nurses (LPNs) are likely to see a reduction in hospital jobs: 36 percent of hospitals expect employment levels to decrease for LPNs in 2015.

Hospital Perceptions of the Local Labor Market for New Graduates & Experienced RNs



The OHW is currently working on a microsimulation forecasting model based on the characteristics of the population (such as age, race and gender) that will provide regional estimates of the demand for healthcare services into the year 2030. That model will also estimate the number of physicians, nurses, dentists and other healthcare providers needed to deliver those services. Those service demand estimates will be compared with forecasts of provider supply in order to identify any geographic areas in which workforce shortages may develop in the future. Such information is essential to ensure that South Carolina has the types and numbers of healthcare providers our state will need in years to come.

Want to find out more about South Carolina's healthcare workforce?

Visit www.officeforhealthcareworkforce.org to access reports, fact sheets and more.

South Carolina AHEC

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Staff from all four regional centers and the program office gathered in March for the South Carolina AHEC System Annual Meeting.

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