**Situation:** Presentation of the biennial update on Primary Care Medical Education Plans for

North Carolina.

**Background:** During its 1993 session, the North Carolina General Assembly expressed its interest in

expanding the pool of generalist physicians for the state. The General Assembly mandated that each of the state's four schools of medicine develop a plan setting goals for an expanded percentage of medical school graduates choosing residency positions in primary care. (Primary care was defined as family practice, internal medicine, pediatrics, and obstetrics-gynecology.) General Statute 143-613 as contained in House Bill 230 passed in the 1995 session of the North Carolina General Assembly requires an update of these plans beginning in 1996 and every two years

thereafter.

**Assessment:** The plans of the four schools (Brody School of Medicine, East Carolina University;

Duke University School of Medicine; University of North Carolina at Chapel Hill School of Medicine; and Wake Forest University School of Medicine) built upon the unique missions and programs of the schools. Although specific activities differ between the schools, they all have implemented initiatives in similar areas in order to increase the percentage of graduates choosing careers in primary care. In each case, the schools also have built upon their long-standing relationships with the AHEC Program in order to conduct increased medical student and primary care residency training in community settings. This report presents the 2014 Update to these primary care

medical education plans.

**Action:** This item is for a vote.

# Report to the Board of Governors University of North Carolina System

# 2014 UPDATE: PRIMARY CARE MEDICAL EDUCATION PLANS

# From

Brody School of Medicine, East Carolina University
Duke University School of Medicine
University of North Carolina School of Medicine
Wake Forest University School of Medicine
North Carolina AHEC Program

This report is submitted to the Board of Governors of the University of North Carolina in response to General Statute 143-613 as contained in House Bill 230 passed in the 1995 session of the North Carolina General Assembly.

April 2014

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# 2014 UPDATE: PRIMARY CARE MEDICAL EDUCATION PLANS

### **EXECUTIVE SUMMARY**

During its 1993 session, the North Carolina General Assembly expressed its interest in expanding the pool of generalist physicians for the state. In Senate Bill 27 as amended by House Bill 729, the General Assembly mandated that each of the state's four schools of medicine develop a plan setting goals for an expanded percentage of medical school graduates choosing residency positions in primary care. Primary care was defined as family practice, internal medicine, pediatrics, and obstetrics-gynecology. It set the goal for the ECU and UNC Schools of Medicine at 60 percent of graduates. For the Wake Forest University and Duke University Schools of Medicine, it set the goal at 50 percent. The General Assembly also mandated that the N.C. Area Health Education Centers (AHEC) Program develop a plan to expand the number of primary care residency positions. Finally, the legislature mandated that a monitoring system be developed by the Board of Governors to report on specialty selection by medical students at graduation and five years after graduation.

In 1994, the four schools of medicine and the N.C. AHEC Program submitted primary care educational plans for increasing the percent of medical school graduates choosing primary care residency programs and subsequently generalist practice. General Statute 143-613 as contained in House Bill 230 passed in the 1995 session of the North Carolina General Assembly requires an update of these plans beginning in 1996 and every two years thereafter.

The plans of the four schools built upon the unique missions and programs of the schools. Although specific activities differ between the schools, they all implemented initiatives in similar areas in order to increase the percentage of graduates choosing careers in primary care. In each case, the schools also built upon their long-standing relationships with the AHEC Program in order to conduct increased medical student and primary care residency training in community settings. The following attachments highlight the specific changes which have taken place since 1994. A brief summary of the themes addressed by the updates includes the following:

- <u>Pre-medical Students</u>: Each school has increased contact with pre-medical students in order to make clear the opportunities for practice as a generalist physician. Several of these activities target minority and disadvantaged pre-medical students.
- <u>Admission to Medical School</u>: Each school has placed increased emphasis on the admission of students with an interest in generalist practice. All four admissions committees have primary care physicians as members.
- <u>Primary Care Role Models:</u> Each school expanded activities to give students an in-depth and continuing exposure to generalist physicians at the school and in community settings. Over the four years of medical school, students receive career advising, mentoring, and role modeling from these physicians.

- <u>Curriculum Changes</u>: Each school implemented curriculum changes that give students greater exposure to primary care. While the curricula and the plans of the four schools vary greatly, the following are themes that are found in each of the plans:
  - increased education in the ambulatory setting
  - increased rotation of students at all levels to community practices, with a particular focus on rural and inner city underserved areas
  - increased emphasis on topics that are critical to the practice of the generalist physician. These include: management of chronic illness, prevention, nutrition, ethics, health care organization, financing, population health and more effective uses of information technology
  - increased emphasis on the physician as a member of a cost-effective health care team operating in a managed care environment.
  - Community Practitioner Support: Each school and its affiliated AHECs, in association with the Office of Rural Health and Community Care, the North Carolina Community Health Center Association, and the Community Practitioner Program of the NC Medical Society Foundation, have expanded activities in support of generalist practitioners in community settings. Special emphasis has been given to practitioners in rural, inner city, and isolated settings. Some activities include:
    - expanded opportunities for physicians to serve as preceptors and to benefit from faculty development programs, telecommunications, reimbursement for teaching, etc.
    - continuing education targeted to improve practice outcomes
    - support for practices involved in quality improvement and practice redesign initiatives
- <u>Information Services and Telecommunications</u>: The four schools and their affiliated AHECs expanded existing library and information services to primary care physicians in underserved settings. These developments also include developing teleclassroom units at the schools, the AHECs, and at selected smaller hospitals and health centers to strengthen student education in these sites and to decrease the isolation of practitioners. The AHEC Digital Library, a comprehensive electronic set of information resources, including searching databases, full-text journals and other resources, is available to all community practitioners who serve as preceptors for students.
- <u>Primary Care Residency Training</u>: Each school and the AHECs have expanded the number of primary care residency positions and developed rural and inner city training opportunities for residents.

The dean and the faculty at each of the four schools of medicine have taken seriously the mandate of the General Assembly and have implemented plans that will help increase the number and percentage of medical students choosing primary care residency programs and, subsequently, generalist practice. This report, with attachments from the four schools of medicine and the N. C. AHEC Program, responds to that legislative mandate by providing an update on current and planned initiatives which are directed toward ensuring that our medical care education programs meet the needs of our students and achieve the goal of increasing the primary care workforce for our citizens.

# Update: Primary Care Education Plan **Duke University School of Medicine**

Report to the Board of Governors of the Consolidated University of North Carolina

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February 26, 2014

A report in response to General Statue 143-613 as amended by Chapter 507 of the 1995 Session Laws (House Bill 230) of the North Carolina Assembly

# 2014-Update: Primary Care Education Plan Duke University School of Medicine

In 1994 the Duke University School of Medicine submitted an educational plan with the goal of encouraging students to enter the primary care disciplines of general internal medicine, general pediatrics, family medicine, and obstetrics/gynecology.

Support for these innovations has come from the North Carolina AHEC, a training grant from the U.S. Health and Human Services Grants for predoctoral education in family medicine, from the NC Academy of Family Practice, the Josiah Mercy, Jr. Foundation, the Fullerton Foundation, Hewlett Packard, the Duke Endowment, donations and substantial support from the Office of Medical Education at Duke.

One measure of our programs to train individuals for a career in primary care is the distribution of graduates across residencies. A substantial proportion (82% in 2013) of Duke graduates enter primary care residencies.

| PROGRAM                 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|-------------------------|------|------|------|------|------|------|
| Family Practice         | 2    | 0    | 1    | 3    | 2    | 3    |
| Internal Medicine       | 20   | 20   | 17   | 16   | 18   | 26   |
| Preliminary             | 14   | 11   | 16   | 12   | 14   | 19   |
| Medicine/Pediatrics     | 2    | 6    | 2    | 1    | 2    | 2    |
| Obstetrics & Gynecology | 3    | 1    | 3    | 3    | 4    | 5    |
| Pediatrics              | 5    | 7    | 6    | 8    | 10   | 9    |
| Total Graduates         | 98   | 103  | 106  | 90   | 99   | 103  |

Note: the proportion of graduates entering primary care includes one year Internal Medicine residencies expected to lead to sub-specialty training.

### The Generalist Activities include:

# 1. Improving Community Relations to address disparities in health care

Duke's modern history with community engagement began in 1996, when leadership and faculty of the Duke Department of Community and Family Medicine and the School of Nursing worked with the leadership of Durham County's Health and Social Services Departments, the local federally qualified health center (FQHC), and its then-rival hospital, Durham Regional Hospital, to initiate a series of discussions about improving the health of Durham's low-income populations.

In 1998 CFM created the Division of Community Health (DCH) to work with communities in Durham and across North Carolina to build innovative interprofessional models of care to improve health at the individual and at the population level. The models of care utilized multi-disciplinary teams of social service (MSWs, LCSWs, family counselors and

psychologists) and health care providers (Pharm Ds, RDs, PAs, NPs, OTs and PTs) along with non-licensed community health workers; and placed primary care and care management services in accessible locations for individuals and families - in their homes, in schools, and in neighborhoods. Examples of DCH's varied programs include:

- Three new neighborhood clinics planned with their communities in partnership with Durham's FQHC (Lincoln Community Health Center), seeing over 17,000 patient encounters annually. 82% of the patients served are uninsured.
- The Just for Us Program a multi-agency, interprofessional team providing in-home primary care, nutrition, occupational therapy, and case management to elderly and/or disabled residents of Durham living in 13 public/subsidized housing centers in Durham County, planned with the senior centers and the seniors. The program provides more than 2,000 patient visits annually.
- Four school-based health centers (3 elementary schools and 1 high school) that generate over 3,000 encounters per year, planned with the schools and their communities.
- Local Access to Coordinated Health Care (LATCH) a care management program that draws on the resources of multiple agencies including the County Departments of Health and Social Services and Lincoln Community Health Center that has served more than 22,000 uninsured Durham residents since its inception.

In addition, the Division operates the Northern Piedmont Community Care Network (NPCC), part of the Community Care Program of North Carolina. NPCC provides care management services for more than 70,000 Medicaid enrollees across Durham, Franklin, Granville, Person, Vance and Warren counties. The NPCC network links and coordinates services for 53 primary care practices, six hospitals, and local departments of social services, health and mental health across the six-county region.

All of these programs began with our strategy for community engagement. Together, with our partners, we ask about and listen to concerns (literally going door to door in neighborhoods), analyze and share healthcare utilization and costs, explore barriers to care, identify partner needs and resources, plan/redesign services, track outcomes, and share accountability. Our evaluation data demonstrated that these programs have been improving hospitalization rates and emergency department use, and fulfilling unmet patient needs for meaningful access to primary care, and support in managing their own health.

### 2. Development of primary care faculty

Duke faculty continues to play a leading role in faculty development of community preceptors from all North Carolina Medical Schools through the North Carolina Academy of Family Physicians and the NCAHEC Program through its Office of Regional Primary Care Education (ORPCE) teaching sites.

A large group of primary care faculty serve on the Medical School's Curriculum, Admissions, and Promotions Committees as well as representation on both Graduate Medical Education and Continuing Medical Education Committees.

The network of primary care practices added to Duke continues to be a resource for teaching medical students. NCAHEC ORPCE teaching sites also play a major role in primary care teaching.

The School of Medicine is committed to promoting development of outpatient preceptors and sponsored a school and community-wide faculty development workshop January 2013 and again in October, 2013 in conjunction with the School of Nursing.

# 3. Ambulatory Care Resident Leadership Track

The Department of Medicine Residency Program has proudly offered the Ambulatory Care Resident Leadership Track since July 2012. This program provides enhanced training opportunities for upper-level (PGY-2 and 3) internal medicine residents interested in ambulatory careers who want to enhance their clinical, academic (clinical teaching, advanced EBM, and QI) and leadership skills in the ambulatory setting. Residents in the program are blocked together for extended ambulatory rotations (using four weeks of hospital-based consults during each year in the program) that include dedicated additional didactic time, broad-ranging ambulatory clinical experiences, instruction in teaching skills, and leadership training. In addition, we routinely schedule social and educational events to promote connections with peers and like-minded faculty (e.g., in conjunction with the NC ACP). This year we have added training in political advocacy and the group will travel to Washington, DC to lobby legislators on important health care topics. Interest from current residents as well as applicants to the residency program has been quite high, as well as from the combined Medicine-Psychiatry residency program. . Dr. Alex Cho, Associate Program Director for Ambulatory Care, leads the program along with Dr. Danielle Zipkin and the Ambulatory/Duke Regional Chief Resident, who this year is Dr. Stephen Bergin.

# 4. Development of Research Programs in Primary Care

Research efforts in primary care have continued in the areas of treatment of common illness, health outcomes, general health status, and health services delivery. Such research is being carried out in the Health Services Research Program at the Veteran's Administration Medical Center, the Epidemiology Program in the Department of Psychiatry and the Aging Center, the Clinical Epidemiology and Biostatistics Program, and the Department of Community and Family Medicine. The Health Promotion and Disease Prevention Center at the Veteran's Administration Medical Center is active in the medical school curriculum. Many students participate in primary care research in their third year at Duke through the combined MD/MPH program, the Epidemiology, Health Service and Health Policy Study Program, and the Master's of Health Science in Clinical Research degree and the Duke Center for Community Research.

# 5. Admissions and Premedical Preparation

Duke is proud to be a site of the AAMC's Robert Wood Johnson-funded Summer Medical Enrichment Program. This program sponsors college sophomores and juniors from disadvantaged backgrounds to attend a six-week program introducing them to a variety of programs associated with health professions. This introduction includes experiences related to primary care fields as well as shadowing programs.

### 6. Financial Aid

The new Primary Care Leadership Track awards students a scholarship of \$10,000 each in lieu of loan for the four years of the program. Students must match and practice in a Primary Care field and will be tracked for five years post-graduation. Those who choose to change to a specialty not designated Primary Care will then need to repay the scholarship at seven per cent interest.

Duke continues to aggressively secure financial aid for student and identifies scholarships available for those interested in Primary Care. Primary Care financial aid programs are overseen by the Assistant Dean of the Primary Care Program in coordination with the Financial Aid Office to help ensure that eligible students are aware of the opportunities.

Duke participates with the Department of Health and Human Services to pursue grant and loan programs to benefit students interested in Primary Care. Duke continuously researches scholarships that would provide assistance to those interested in Primary Care.

### 7. Medical School Curriculum

#### A. Practice Course

The Practice course exposes all students at Duke to early ambulatory medicine in year one and provides much of the ambulatory care core training at Duke preclinically and during the clinical year. Students are taught the basic skills they need to be effective in the ambulatory setting. The course is still required for first, second and third year students.

All third or fourth year students are required to have a longitudinal ambulatory care experience. Ambulatory experiences are included as part of several core clerkships.

### **B.** Primary Care Leadership Track

The Primary Care Leadership Track (PCLT) launched in 2011, is a four-year program to prepare physicians with knowledge of the health care system, understanding of longitudinal chronic illness care, and skills to work effectively in teams to care for patients and improve systems of care. To date, 21 students have matriculated into the program. These students will enter residency prepared to engage with communities and practices to help improve health outcomes. The curriculum of the PCLT builds on a longstanding partnership between Duke and the Durham community to understand the causes of health disparities, create a strong research focus on community engagement, and redesign clinical programs to improve health outcomes. Students committed to primary care are specifically recruited and participate in an innovative 4-year curriculum designed to support their interest and develop skills needed for community-engaged, population-based practice, and leadership positions.

PCLT students and PA students in the Underserved Community Scholars Program participate together in a course on the Patient-Centered Medical Home. This training has given a benefit for the PA graduates pursuing job opportunities.

### C. Community Health Day

Since 2012, Duke has hosted an annual Community Health Day. Supported by the Chancellor's Office, the Primary Care Leadership Track, and the Goldstein Foundation, this event showcases service and research being done in coordination with the community. The Schools of Medicine and Nursing sponsored the event and invited submissions from the undergraduate campus, programs in medicine, Physical Therapy, Physician Assistant, nursing, as well as residencies.

### 8. Extracurricular Activities

# A. Primary Care Progress Chapter

Duke has a local chapter of Primary Care Progress. Primary Care Progress is a growing network of medical providers, health professional trainees, policy pundits, advocates, and educators united by a new vision for revitalizing the primary care workforce. The group works through strategic local advocacy that promotes primary care and transforms care delivery and training in academic settings. Duke and UNC chapters collaborate on local activities.

# **B.** Student Interest Groups

The Family Medicine Interest Group continues to provide opportunities for all students interested in primary care with a chance to learn primary care clinical skills and share interesting topics. Other interest groups, such as one in pediatrics, are also active. Duke also has a Community Health Interest Group that addresses student interest in the health of the community.

### 9. Primary Care Residency Training

Duke continues to have five residency tracks that can lead to the practice of primary care: general internal medicine, general pediatrics, a combined medicine/pediatrics residency, family medicine, and obstetrics/gynecology. The Duke Family Medicine Residency has undergone significant changes in the past five years. The goal of the program is to produce clinically skilled Family Medicine physicians who have the abilities to lead and collaborate with clinical teams to meet the health care needs of patients and populations. The program incorporates community-engaged research for population health reform and leadership training.

### 10. Community Practitioner Support

Duke continues to work closely with the other three medical schools in North Carolina and the North Carolina Area Health Education Centers Program (AHEC). Duke continues to coordinate placement of the majority of its community learners with practitioners throughout the state with assistance from the Office of Regional Primary Care Education (ORPCE). The ORPCE staff has continued to be very successful in recruiting, training, and supporting community preceptors in their

regions. Duke supports key community practices with teaching resources whenever possible.

# 11. Tracking Students and Residents

Duke maintains information on training and practice activities of its students and house staff alumni through several sources. Local records are kept of residencies entered and current addresses of those in practice. AAMC provides information about the status of residency training. These data are summarized and forwarded annually to the statewide coordinator at the AHEC central office, who, in turn, reports to the North Carolina State Legislature.

# 12. "Playbook" to Integrate Primary Care and Public Health

The Department of Community & Family Medicine is the lead organizer of a multipronged national effort to integrated primary care and public health. Funded by the deBeaumont Foundation, and with the support of the Centers of Disease Control and Prevention, and assisted by a wide array of national primary care and public health agencies and groups, the Department is about to release a national 'Playbook' of advice and guidance on improving health of communities across the United States, building on examples from North Carolina to Washington State, and from rural counties to entire states. A parallel North Carolina/South Carolina effort to train primary care residents in population health has also been funded by the Fullerton Foundation of South Carolina, and is led by Duke, while a national effort in population health for primary care residents has been funded by the CDC, with Duke serving as the lead organization, working with the Association of American Medical Colleges, and with a goal of identifying and sharing curricular materials relevant to population health.

### 13. The Duke-Johnson & Johnson Nurse Leadership Program

This program provides advanced practice nurses with a year-long transformational leadership development experience to prepare them to implement change in their practice settings and within the evolving and challenging health care environment. Through its rich leadership and management program content, this certificate program trains the advanced practice nurse to be better able to meet the challenges of the evolving health care environment. Fellows who successfully complete the program will be equipped with the skills and competencies to lead health care teams to increased operational efficiency and improved patient outcomes with a focus on underserved populations. With a focus on the creation and sustainability of patient-centered practices, the Program emphasizes the behaviors of exemplary leaders to enable nurse professionals to identify different types of personal leadership styles and philosophies and learn how to incorporate and expand upon them when directing health care teams.

### Summary

The Primary Care Leadership track continues to thrive at the medical school, attracting top students from around the country. The PA program - Underserved Community Scholars Program launched in 2012, continues to place PA trainees in rural communities. Those PA and the PCLT students study together how to create a Patient-Centered Medical Home. Undergraduates, health professional students, and residents continue to participate in the annual Community Health Day to help make them aware of the efforts being made at Duke to address community health issues and encourage them to consider training in primary care at Duke. The Ambulatory Medicine Resident Leadership Track is an exciting new development launched in 2012 to increase the number and skills of medicine residents in ambulatory primary care. The Family Medicine residency is ensuring its graduates have skills that will allow them to be leaders in community health improvement after graduation. Duke's expanded network of primary care practices have continued to increase training sites for learners as well as provided excellent primary care. Duke continues to be active in research areas that impact the health of communities. Duke is committed to innovations in primary care service, research, and education to meet the health care needs of the public.

# Report to the Board of Governors University of North Carolina System

2014 Update: Primary Care Medical Education Plan

Brody School of Medicine East Carolina University

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February 14, 2014
A report in response to the General Statue 143-613 as amended by Chapter 507 of the 1995 Session Laws (House Bill 230) of the North Carolina Assembly

### Introduction

Since the creation of the Brody School of Medicine at East Carolina University by the North Carolina General Assembly in 1975, we have remained true to our legislatively-mandated mission. This three-part mission of the Brody School of Medicine is:

- To educate primary care physicians
- To provide access to careers in medicine for minority and disadvantaged students
- > To improve health care in eastern North Carolina

We are privileged to work with a faculty, staff, and student body that embrace this mission and help us to achieve these goals. The American Academy of Family Physicians has recognized the Brody School of Medicine as the nation's top medical school for producing Family Physicians between 1999 and 2009, and more recently as the number one US medical school in percentage of graduates entering Family Medicine residencies from 2009-2012. In 2013 US News & World Report ranked the Brody School of Medicine in the top twenty U.S. Medical Schools in Primary Care and in the top ten U.S. Medical Schools in graduates entering primary care residencies.

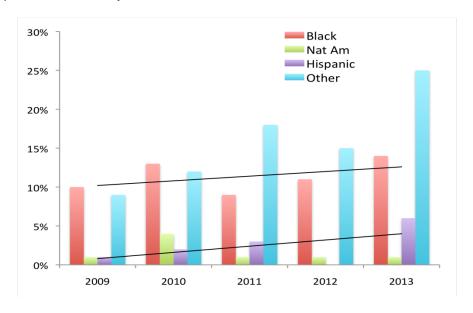
### **Admissions Process**

Fulfilling our mission begins with the admissions process. The Admissions committee includes students, community physicians and faculty who strive to select an entering class that reflects the diversity of the state and shows promise of becoming primary care physicians in North Carolina. Applicants must not only meet standards of prior classes' MCAT and GPA scores but must demonstrate considerable exposure to medical practice and significant contributions to community service. The goal of the Admissions committee is to select an entering class that reflects the diversity of the state of North Carolina and is comprised of students of a variety of ages, ethnic backgrounds, cultural heritages and religious beliefs. With an applications pool of 850 to 900 students (all of whom are North Carolina residents), the committee selects 80 students to matriculate annually. All applicants who are not selected are encouraged to reapply and to meet with the Dean of Admissions to discuss how to enhance their application process in the future.

The Dean of Admissions holds an annual Pre-Medical Advisors Conference with college pre-medical student advisors from throughout North Carolina. This fosters a greater understanding of the mission and outcomes of medical graduates from the Brody School of Medicine. In 2011 the School of Dental Medicine at East Carolina University was invited to participate in order to enhance the enrollment of professional students at both schools.

For the past fourteen years the Brody School of Medicine has an offered an "Early Assurance" program with the East Carolina University undergraduate Honors College. This innovative plan guarantees enrollment into the Brody School of Medicine to four outstanding freshman students at East Carolina University upon successful completion of their college degrees. This Early Assurance model has recently been expanded to include NC Agricultural and Technical State University, UNC-Pembroke, Elizabeth City State University, and Bennett College. Students selected for early assurance are mentored over the four college years by the Dean of Admissions with regular individual and group meetings. They must maintain a set grade point average, participate in enrichment activities, and (depending on their undergraduate standardized test scores) are not required to take the Medical College Admissions Test.

As a result of these collective efforts, we continue to enjoy high levels of diversity among our student body, placing us consistently above the >90<sup>th</sup> percentile nationally for underrepresented minority students in the school:



### **Curriculum Emphasis for Primary Care**

Medical students at the Brody School of Medicine are introduced to primary care in the first two years by the Doctoring I and Doctoring II courses. These courses are directed by faculty members from Family Medicine, and include teaching faculty from Family Medicine, Internal Medicine, and Pediatrics. During these courses. students learn to take a thorough history and achieve competence in physical examination skills. Students are mentored in the clinical skills lab and taught by standardized patients and physical diagnosis trainers who work with the primary care faculty in assuring understanding and excellence. As part of these courses, students participate in primary care preceptorships during the first and second years. This is a popular activity whereby students work one-on-one with a community preceptor in a primary care physician's office throughout North Carolina for a week each year in the preclinical years.

The third year curriculum includes clerkships in Family Medicine, Internal Medicine, Pediatrics, Psychiatry, Surgery and OB/GYN. Students are intimately involved in the team care of the patients. On the Family Medicine clerkship, students spend 50% of their time (4 weeks) living and working in a North Carolina community, residing in AHEC housing and experiencing community primary care. The Pediatric Clerkship includes a two-week community based elective in eastern North Carolina during which students live in AHEC housing and see children with a local pediatrician. They also investigate a population health issue and report back to their cohort upon their return to campus.

During the fourth year, all students are required to take a four-week elective in Primary Care. They also have 14 weeks to choose an elective which enhances their career choice and residency preparation.

This early and applied exposure to primary care contributes to our success in placing our graduates in primary care residencies. The table below provides detailed information regarding primary care residency selection by Brody School of Medicine students from 2010 to 2013:

| Primary Care                                    | 2010    |        | 2011    |        | 2012    |        | 2013    |        |
|---|---------|--------|---------|--------|---------|--------|---------|--------|
| Total<br>Graduates                              |         | 66     |         | 70     |         | 74     |         | 70     |
| Total<br>Graduates not<br>entering<br>residency |         | 0      |         | 2      |         | 3      |         | 2      |
| Total<br>Graduates<br>entering<br>residency     |         | 66     |         | 68     |         | 71     |         | 69     |
| Primary Care                                    | Percent | Number | Percent | Number | Percent | Number | Percent | Number |
| Family<br>Medicine                              | 18.20%  | 12     | 19.00%  | 13     | 22.50%  | 16     | 13.04%  | 9      |
| Internal<br>Medicine                            | 13.60%  | 9      | 7.00%   | 5      | 21.10%  | 15     | 7.24%   | 5      |
| Pediatrics                                      | 12.10%  | 8      | 17.00%  | 12     | 14.10%  | 10     | 20.28%  | 14     |
| Family/Psych                                    |         |        |         |        | 0.00%   |        |         |        |
| Med/Psych                                       |         |        | 1.00%   | 1      |         |        | 1.44%   | 1      |
| Peds/Genetics                                   |         |        |         |        |         |        | 1.44%   | 1      |
| IM/EM   |         |        | 100%    | 1      |         |        |         |        |
| IM/Peds   | 3.00%   | 2      | 9.00%   | 6      | 5.60%   | 4      | 5.79%   | 4      |
| TOTAL   | 46.90%  | 31     | 55.00%  | 38     | 63.30%  | 45     | 49.27%  | 34     |
| OB/Gyn  | 7.50%   | 5      | 4.00%   | 3      | 5.60%   | 4      | 8.69%   | 6      |
| Total w/<br>OB/Gyn                              | 54.50%  | 36     | 65.00%  | 41     | 69.00%  | 49     | 57.97%  | 40     |

Following residency training, Brody graduates make a significant contribution to the region and state, as shown below:

| US Medical School Graduates               |       |                  |  |  |  |  |
|---|-------|------------------|--|--|--|--|
|   | Brody | National Average |  |  |  |  |
| Practicing in rural areas                 | 21.6% | 7.6%             |  |  |  |  |
| Practicing in underserved areas           | 35.5% | 16.1%            |  |  |  |  |
| Practicing in North Carolina (same state) | 53.7% | 34.1%            |  |  |  |  |
| Practicing in Primary Care                | 40.5% | 28.9%            |  |  |  |  |
| Practicing Family Medicine                | 20.4% | 7.9%             |  |  |  |  |

# Self-Directed

### **Learning Opportunities**

Over 60% of graduating students participate in structured service-learning activities that help guide their career choices. As an example, Brody students manage two community service clinics with the help of Brody clinical faculty who volunteer as preceptors and 80% of students gain patient experience in a free clinic.

The Greenville Community Clinic is organized by students and run by a board made up of community members, faculty and students. The clinic meets twice a week in the evening and many students participate at each clinic under the guidance of faculty. The Grimesland Clinic meets every Sunday and is organized completely by students. They see approximately 10 to 15 patients weekly, predominantly from a local Latino population. Services offered include medications, medical assessments, treatments and referral to medical homes or specialists at the Brody School of Medicine or the Bernstein Clinic. An interpreter is always present to help the patients, students, and physician preceptors from Brody.

Approximately 5% of Brody School of Medicine students are awarded Schweitzer Fellowships annually. These service-learning awards enable students to build leadership skills and teach service to others.

The Brody School of Medicine continues to sponsor our "Summer Program for Future Doctors" from May to July each year (<a href="http://www.ecu.edu/spfd">http://www.ecu.edu/spfd</a>). This 9 week program is primarily for college students and graduates from underrepresented populations who wish to become physicians. They receive a living stipend to attend the program, which enables them to enhance their knowledge of anatomy, biochemistry, neuroscience and physiology, as well as demonstrate their abilities to perform successfully in a medical school curriculum. In addition, they are taught academic study skills and are able to experience clinical patient care in our primary care clinics. Approximately 30 students are enrolled each year after a robust application process. In 2013, 42% of the participants were from Tier 1 and Tier 2 counties, and 39% were from underrepresented minority groups. Forty-eight percent of the

participants in the 2012 Summer Program for future Doctors have been admitted to medical school.

Brody students may apply for a Leadership Scholarship program which mentors 12 students per year in a program to enhance their leadership potential. Service learning is component of this program led by two of our faculty.

There are several student interest groups which students are encouraged to join during orientation to medical school. These include the Family Medicine Interest Group, the Med/Peds Interest Group, the Internal Medicine Interest Group, and the Pediatric Interest Group. Service learning is included in the goals of each of these groups.

Our students initiated a "Second Look" weekend in 2012, whereby students already accepted to the Brody School of Medicine were invited to visit campus before matriculation and witness a broader vision of the educational experience at Brody. The students created a video called "Brody Second Look 2012" (<a href="https://www.youtube.com/watch?v=SqKIYcWr3iQ">https://www.youtube.com/watch?v=SqKIYcWr3iQ</a>), featuring student and faculty interviews and demonstrating their tremendous pride in the school. Many of the recorded comments praise the primary care mission.

### **New Initiatives**

The Brody School of Medicine is one of 11 medical schools nationwide that received grants through the American Medical Association's "Accelerating Change in Medical Education Initiative". Brody's program is entitled "Redesigning Education to Accelerate Change in Healthcare", or REACH, Through this initiative, a group of 38 East Carolina University faculty members will spend the next 12 months exploring ways to educate students about patient safety, quality improvement, team-based care, and population health, along with new ways of teaching that engage students more actively in their own education. As part of this Teachers of Quality Academy program, these faculty will undergo advanced training in these new competencies needed for our health care system, develop projects to apply these skills across the health sciences division, and train medical students and other health professions students in these concepts. The group comprises faculty members from the Brody School of Medicine (clinical medicine and public health), College of Nursing, and the College of Allied Health Sciences, along with medical residents. A key emphasis will be to prepare faculty members to teach system analysis competencies to students while also experiencing interprofessional team based care principles and practices.. The ultimate result of the academy will be a redesigned medical curriculum that addresses safety, quality, and interprofessional education, and that could serve as a model for the nation's other medical schools.

Continuing curriculum renewal resulted in the spring 2013 introduction of a problem-based learning curriculum that spans the first two years of medical school, as well as refinements in the professionalism and longitudinal career planning course "Pirate MD" that was introduced in 2011. These courses emphasize a small-group instructional setting, facilitated

by paired basic science and clinical science faculty, and the career planning component has been expanded to include third-year and fourth-year medical students as facilitators.

# Primary Care Medical Education Plan 2014 Update

# The University of North Carolina at Chapel Hill

# **School of Medicine**

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February 2014

A report in response to General Statute 143-613 as amended by Chapter 507 of the 1995 Session Laws (House Bill 230) of the North Carolina Assembly

#### **PREFACE**

The UNC School of Medicine (UNC SOM) continues its fundamental and substantial support for primary care, and is proud to celebrate that in 2013 US News and World Report named us the #1 primary care school in the nation. This is evidence of our efforts and success as a leading public medical school in supporting the primary care mission in NC and beyond.

Our School of Medicine is strong in primary care because of our mission. To meet that mission, we have an important teaching presence for primary care faculty, numerous clinical experiences in primary care settings across the state, extensive service and research opportunities, collaboration with the North Carolina AHEC distributed educational system, and ongoing tracking of the longer term outcomes of medical education through the Health Profession Workforce unit at the Cecil G. Sheps Center for Health Services Research. These programs have been outlined in prior reports. This report outlines new programs that the UNC SOM has added to its primary care medical education plans since 2012 and provides updated data on some of our existing work.

#### PREMEDICAL PREPARATION AND ADMISSIONS

In an effort to address the physician shortage, the UNC School of Medicine has increased enrollment from 160 to 180 students per year. Should funding be available, we are interested in increasing our class size even more.

More than 5000 students apply to UNC SOM. We attempt to select those who are both academically qualified and most likely to make an impact of service in the broad spectrum of need through their doctoring. The chart below illustrates our success at matriculation of those we accept, and our success in building a class that is diverse.

| Арр  | Total | Total | Offers of  | Total offers of | Matriculated | Matriculated | Enrolled    | Enrolled  |
|------|-------|-------|------------|-----------------|--------------|--------------|-------------|-----------|
| Year | Apps  | Apps  | Acceptance | acceptance for  | In-State     | Out of State | Under       | MED       |
|      | Rcvd  | Rcvd  |            | In State        |              |              | Represented | Graduates |
|      |       | in-   |            |                 |              |              | Minority    |           |
|      |       | state |            |                 |              |              |             |           |
|      |       |       |            |                 |              |              |             |           |
| 2012 | 5125  | 910   | 246        | 196             | 158          | 22           | 38 (21%)    | 17        |
| 2013 | 5154  | 915   | 238        | 175             | 152          | 28           | 33 (18%)    | 16        |

The Office of Medical Education oversees diversity efforts through its Office of Special Programs. The Medical Education Development (MED) is a nationally known, 40-year-old SOM program pipeline program that helps facilitate diversity within the student body by recruiting and supporting minority and/or disadvantaged students. It provides students a chance to enhance their academic credentials while preparing for medical or dental school admission and increases personal and academic skills for coping with professional training. Expansion of the

MED program is a goal of our strategic plan, including expanding its scope to include more Hispanic/Latino students and disadvantaged rural students of all ethnic backgrounds.

#### THE MEDICAL SCHOOL CURRICULUM

As discussed in the 2012 report, the Strategic Plan of the School of Medicine highlighted the need to modernize our School of Medicine curriculum. In August of 2014, with the incoming class, we will launch that new curriculum, Translational Education at Carolina. This innovative curriculum is built on the following principles:

Our School of Medicine Curriculum will...

- be student-centered and patient based, while being population, public health, and globally inspired
- facilitate translation and integration of basic, clinical, and population science to enhance human health and well-being
- provide a strong foundation for entry into graduate medical education within the broad opportunities of medicine, while being flexible and individualized
- be responsive to the changing healthcare environment
- focus on promoting, supporting and maintaining health, not just treating disease
- incorporate strengths of the university including opportunities for inter-professional and cross-disciplinary education
- provide longitudinal engagement with faculty and robust mentorship
- incorporate multiple modes of student learning
- instill intellectual curiosity developing an aptitude for critical thinking and lifelong learning
- promote the development of leadership skills, professionalism, ethics, humanism, and service to others

This curriculum will better emphasize population health concepts, the medical home model, interprofessional education, and professional development. Students will enter the clinical environment earlier in their medical school experience and will enter residency better prepared. Students will have the opportunity to individualize their curriculum through tracks and more elective experiences. In this manner, we anticipate that students with an interest in primary care will have a greater ability to focus on that interest and will be prepared with the skills and knowledge they need to be successful in that setting.

### MEDICAL SCHOOL CAMPUSES IN ASHEVILLE AND CHARLOTTE

A significant enhancement to primary care training for UNC medical students came with the development of new SOM campuses in Asheville and Charlotte.

#### **ASHEVILLE**

Beginning in the 2009-10 academic year, UNC SOM, Mission Hospital and MAHEC offered an alternative curriculum in Asheville for medical students. This innovative program was well described in our 2012 report. The program has continued to grow and has demonstrated excellent outcomes in support of primary care. Of the 36 students who have completed or are soon to complete that program, 17 are entering family medicine and 8 more are entering pediatrics and internal medicine. One graduate of that program intends a career in rural general surgery, two in obstetrics and gynecology, and one in psychiatry. Overall, 69% are entering primary care.

In 2014-15 the class size in Asheville will double to 20 students per year.

### **CHARLOTTE**

At the Charlotte campus we began a similar longitudinal curriculum in academic year 2013-14. This pilot began with 6 students and has accepted 12 students for 2014-15. In addition to longitudinal exposure to patients and preceptors, this curriculum also emphasizes simulation teaching and ultrasound technique. The simulation curriculum prepares students to better function in teams while the ultrasound curriculum will allow our graduates to potentially provide more advanced care as primary care

### SARAH GRAHAM KENAN RURAL & UNDERSERVED MEDICAL SCHOLARS PROGRAM

In 2012, Sarah Graham Kenan Rural & Underserved Medical Scholars Program was launched. This program allows a selected small group of medical students (seven in 2012 and six in 2013) to identify their interest in rural health, relate to a mentor rural preceptor, engage in a community project in a rural area in the summer after their first year, participate in the Asheville longitudinal program for their clinical education, and experience focused small group sessions to advance their skills and knowledge about rural primary care. Some scholarship support for these students is provided thanks to the Kenan Charitable Trust. The purpose of this program is to ultimately increase the number of UNC SOM students seeking rural health careers in North Carolina and to provide financial support and enrichment experiences to sustain their decisions.

A similar program is being piloted in 2014 in Charlotte, focusing on the Urban Underserved. Two students will participate this first year.

Regional campuses are a unique feature of the UNC SOM that accrue substantial benefit to UNC students and faculty. As evidenced above, regional campuses create an environment for incorporating innovation into the curriculum, are a much more cost effective model, leverage the faculty and resident teaching capacity already in place at the regional campuses and create the potential for drawing a much larger pool of doctors into primary care. Though not like Asheville and Charlotte which have distinction as Regional Campuses, we are continuing to build our clinical education sites in Wilmington, Greensboro, and Raleigh. At each site we already have significant clinical experiences for our students but would like to expand the

experiences to include all clinical disciplines and therefore have more opportunities for longitudinal placements of students in those communities.

### **HISPANIC HEALTH INITIATIVE**

In 2011-12, the SOM created the Hispanic Health Initiative to bring together a number of programs to meet the emerging needs of North Carolina. In addition to recruitment and retention of Hispanic medical students, the initiative includes several programs focused on teaching students to care for the Latino population. At the core of the HHI is the longitudinal Spanish language and cultural track, the Comprehensive Advanced Medical Program of Spanish (CAMPOS). Started in 2004, CAMPOS identifies incoming first-year students who are proficient in Spanish and who wish to focus on the Latino population during their time in medical school. The goal is to create bilingual and bicultural physicians. For the 2013-14 academic year, there are a total of 55 students registered for CAMPOS.

### MD/MPH COMBINED DEGREE PROGRAM

The MD/MPH program trains leaders for the evolving health care environment of the 21<sup>st</sup> century. It provides students the opportunity to integrate the individual patient perspective with that of the population sciences, thus strengthening each. In 2012 we had 37 students get the MD/MPH degree and in 2013 we had 32. This represents one of the largest and best developed MPH programs for medical students in the nation. It should be noted that students of all specialty interests seek the MPH; by its nature, however, it attracts more interest from those focusing on primary care.

### **EXTRACURRICULAR OPPORTUNITIES**

UNC School of Medicine students participate in a wide variety of activities that provide service to the community and educate students in ways that lead to support of primary care careers. We honor many of those students with membership into the Eugene Mayer Honor Society for Community Service.

In academic year 2013-14 UNC and Duke School of Medicine co-hosted two important regional meetings for student groups, the Student National Medical Association regional meeting and the Latino Medical Student Association regional meeting. These student groups work to support diversity in medical education and in that work, support students pursuing the primary care mission.

Our students also continue to expand the work of SHAC, the Student Health Action Coalition, the oldest continuously running student free clinic. More student-led and faculty supported initiatives have grown out of this model including Beyond Clinic Walls (a mobile SHAC unit), Amigas en Salud, a program for health and wellness in the Latina community, and the Refuge Health Initiative. Participating in these models of interprofessional education and teamwork

prepares students to function in the medical homes of tomorrow and, through student service, hopefully inspires a commitment to meeting the primary care needs of patients and communities.

### OTHER SUPPORT FOR PRIMARY CARE EDUCATION WITHIN THE SOM

Two residency programs in primary care at UNC have developed new and innovative programs. Both of these were highlighted in the January/February 2014 issue of the North Carolina Medical Journal that focused on the Education of Health Professionals. Though not part of the School of Medicine curriculum for the MD degree, the presence of these programs is inspirational for our students and certainly in support of the primary care mission.

In response to the primary care needs of our state, the UNC Department of Family Medicine, in partnership with Piedmont Health Services (PHS) with seed funding from HRSA, Blue Cross Blue Shield, and The Duke Endowment, expanded their residency program to create an "Underserved Track" for Family Medicine training. The goals of the track are to improve access to care in rural Caswell County by training residents in the PHS Community Health Center in Prospect Hill and to increase the number of family medicine physicians practicing in medically underserved settings in North Carolina through a training pipeline.

The Pediatrics Primary Care Residency Program at the University of North Carolina is a HRSA funded program developed in collaboration with Cone Health in Greensboro for 4 residents per year to experience a more longitudinal model of training focused on providing a medical home for children. One hundred percent of the 12 residents in that program, since its opening in 2011, intend careers in primary care.

### **OUTCOMES**

UNC is the largest medical school in the state, now with a class size of 180 students. In a typical year, more than half of graduates from UNC SOM initially enter a primary care residency. Of our 157 graduates in 2007, 80 entered residency in primary care field for residency and more than two-thirds of those were practicing in primary care in 2012. Twenty-five 2007 graduates were providing primary care in North Carolina in 2012, more than from any other medical school in the state.

Based on Sheps Center data regarding the graduating class of 2006 of all medical schools in NC, only 2% of graduates were practicing in rural primary care in NC five years later. Four of those seven graduates were from UNC.

The number of 2012 and 2013 graduates entering primary care residencies is sited in the table below.

|      | Family Medicine | Internal<br>Medicine | Pediatrics | OB/Gyn   |
|------|-----------------|----------------------|------------|----------|
| 2012 | 19 (12%)        | 35 (21%)             | 16 (10%)   | 14 (8%)  |
| 2013 | 19 (11%)        | 24 (16%)             | 13 (8%)    | 17 (11%) |

### **SUMMARY**

The University of North Carolina School of Medicine is a leading public medical school, recognized by US News and World Report as #1 in Primary Care. We are also a bimodal school, with substantial effort and expertise in subspecialty care and research as well. In fact, we were ranked #22 in research in the same report. We remain committed to innovative curriculum and educational programs to support our students' opportunities to become physician leaders in addressing the primary care needs of our state and the health of our population.

# Report to the Board of Governors of The University of North Carolina

# Primary Care Medical Education Plan 2014 Update

# from Wake Forest School of Medicine

March 2014

Respectfully submitted by:

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Director, Northwest Area Health Education Center Associate Professor, Family & Community Medicine

A report in response to General Statute 143-613 as amended by Chapter 507 of the 1995 Session Laws (House Bill 230) of the North Carolina General Assembly In 1994, the Wake Forest School of Medicine submitted an Institutional Plan for Increasing the Number of Generalist Graduates. Initiatives described in the plan included the Primary Care Development Program, the Department of Family Medicine, the partnership with Forsyth County in providing care for the indigent, the administration of the Northwest Area Health Education Center, and the Interdisciplinary Generalist Curriculum. This update will focus on current and planned initiatives, which are directed toward ensuring that our educational programs meet the needs of our students and society.

For many years UNC Higher Education system provided WFSM \$7,000 per year per NC resident enrolled. Starting in 2010, as part of the state's budget reduction management process, that amount was reduced to \$5,000 and in fiscal year 2012, further budget reductions lead to the total elimination of this funding to support NC residents enrolled at WFSM.

Programmatic efforts since the last report have been focused in the following areas:

#### 1. Enrollment

Our 1994 report noted that since 1976, when the General Assembly appropriated funds to give North Carolina students an enhanced opportunity to attend medical school, WFSM had consistently allocated a disproportionately high percentage of the positions in each class to North Carolina Students. However, because of static funding by the legislature and loss of the Board of Governor scholarships, there is a potential for a decrease in training of primary care physicians for North Carolina. Wake Forest has, however, continued the commitment to the disproportionate selection of North Carolina Resident for admission to Medical School. We had 7432 applications for the 2013 entering class, with 753 (10%) applicants from North Carolina residents. Fifty four (54) or 45% of North Carolina residents were selected and matriculated into the 120-member Class of 2017. Over the past five entering years 2009-2013, WFSM has enrolled 247 North Carolina residents. Over the past 5 years the number of applicants from NC has remained relatively stable but the overall enrolled number increased from 47 in 2009 to 54 in 2013. See the recent trend detailed data below and the historical trend in the appendix.

| Year of Matriculation | Total # Applicants | # NC Applicants | NC Matriculants | <u>Total</u>        |
|-----------------------|--------------------|-----------------|-----------------|---------------------|
|                       |                    |                 |                 | <u>Matriculants</u> |
| 2009                  | 7,102              | 731 (10%)       | 47 (39%)        | 120                 |
| 2010                  | 7,389              | 762 (10%)       | 49 (41%)        | 120                 |
| 2011                  | 7,391              | 697 (9%)        | 50 (42%)        | 120                 |
| 2012                  | 8,161              | 781 (10%)       | 47 (39%)        | 120                 |
| 2013                  | 7,432              | 753 (10%)       | 54 (45%)        | 120                 |

#### 2. Curriculum

### A. Community Practice Experience

The current curriculum, entitled *Prescription For Excellence Curriculum* was introduced in 1998. Over the past 15 years the current curriculum has undergone appropriate revisions from year to year. However at present an overall curriculum revision is underway which will provide Wake Forest Medical students earlier clinical exposures, improved continuity and development of longitudinal relationships with faculty mentors and medical teams. Currently our students continue to complete a four-week experience with a primary care practitioner as part of their Community Practice Experience (CPE) course. During this academic year, over 200 students from the classes of 2016 and 2017 were spread throughout North Carolina for their CPE course. As part of this experience, students complete a community profile and learn about the community resources available to the physicians in the practice to which they are assigned. This course is a highlight for many students, some of whom report this early clinical experience is either a reason they chose to come to Wake Forest School of Medicine or is a reason they decided to choose a primary care residency.

### B. Ambulatory Clerkships

During their third year, students complete a four-week rotation in ambulatory Family Medicine and over two weeks in ambulatory Internal Medicine. The Pediatric rotation includes a one-week ambulatory component either at the Downtown Health Plaza or in community practices, and the Women's Health/Obstetrics/Gynecology rotation includes two weeks of ambulatory experience. Additional primary care experiences are available via electives in year 4 of the curriculum. Multiple community-based practice sites are utilized for student education in these electives.

### 3. Office of Regional Primary Care Education

Our 1994 report noted the School's responsibility for administration of the Northwest Area Health Education Center (AHEC). Over the years, the funding from the Northwest AHEC to support faculty and residents in the Department of Family and Community Medicine, Internal Medicine, Pediatrics, Obstetrics and Gynecology, and Psychiatry, and for medical students during their community-based primary care rotations has greatly decreased. In our current fiscal year, the residency education funds have dwindled to primarily support only the Department of Family & Community Medicine. In 1994 AHEC established the Northwest AHEC Office of Regional Primary Care Education (ORPCE) Program to support medical school initiatives in this area. ORPCE staff continues to be extremely helpful in facilitating achievement of the school's primary care education goals.

### 4. Program Evaluation

The School regularly tracks the residency selection of its graduating classes. During the past five years a total of 574 students graduated and participated in the Residency Match program. Of those 574 students, 236 of them (41%) selected a first-year residency position in family practice, obstetrics and

gynecology, internal medicine and pediatrics (see chart below for recent years details and appendix for the overall trend since 1971). With respect to our medical students, based upon the results of the Association of American Medical Colleges (AAMC) Graduate Survey, the WFSM Family Medicine Clerkship is the highest ranked in the nation for student satisfaction, with more than 90% of graduates in 2009 through 2013 reporting their educational experience during their Family Medicine Clerkship was good or very good. Additionally, based upon the AAMC Graduate Survey, our graduates were also highest ranked in the nation for participation in an early primary care exposure that happens in both years one and two of their medical school training, giving them an early exposure to North Carolina Primary Care practitioners.

**Graduating Class of...** 

| Graduating Class of |          |          |          |          |          |            |  |
|---------------------|----------|----------|----------|----------|----------|------------|--|
| Residency           | 2009     | 2010     | 2011     | 2012     | 2013     | 5 year     |  |
| <u>Match</u>        |          |          |          |          |          | Cumulative |  |
|                     |          |          |          |          |          | Total      |  |
| Family              | 4 (4%)   | 11 (10%) | 13 (11%) | 9 (8%)   | 11 (9%)  | 48 (8%)    |  |
| Medicine            |          |          |          |          |          |            |  |
| Internal Med.       | 13 (13%) | 12 (10%) | 13 (11%) | 20 (18%) | 27 (21%) | 85(15%)    |  |
| Categorical         |          |          |          |          |          |            |  |
| Med-Peds            | 2 (2%)   | 2 (2%)   | 1 (1%)   | 0        | 1 (1%)   | 6 (1%)     |  |
| Ob-Gyn              | 6 (6%)   | 5 (4%)   | 6 (5%)   | 0        | 2 (2%)   | 19 (3%)    |  |
| Pediatrics          | 16 (16%) | 12 (10%) | 24 (20%) | 11 (10%) | 15 (12%) | 78 (14%)   |  |
| Total Primary       | 41 (40%) | 42 (37%) | 57 (49%) | 40 (35%) | 56 (45%) | 236 (41%)  |  |
| Care Excluding      |          |          |          |          |          |            |  |
| Preliminary         |          |          |          |          |          |            |  |
| Year                |          |          |          |          |          |            |  |
| Total               | 104      | 115      | 117      | 113      | 125      | 574        |  |
| Graduates in        |          |          |          |          |          |            |  |
| Match               |          |          |          |          |          |            |  |

### **AHEC Family Practice Residency Programs**

Beyond the funding AHEC provides via the residency grants, AHEC also receives an appropriation to support a portion of the operating costs for primary care residency training for programs at the AHEC sites. In 1994 AHEC received new funding to expand training in family medicine in two ways: 1) to create new residencies, with a particular focus on programs to produce graduates likely to enter rural practice; and 2) to expand existing residencies in order to better address the needs of a growing North Carolina population. The following sections provide an update on both the new programs that were created and the expansions of existing programs.

<u>Charlotte AHEC:</u> Carolinas Medical Center has two Family Medicine residency training programs: The Charlotte program, which has 27 residents and the Rural Program in Monroe, founded in 1994 with new funding from AHEC, which has 2 residents per year of training. Unique features of the Charlotte program include an Integrative Medicine curriculum, as well as the urban/underserved training track, which trains 3 residents per year and whose graduates serve various underserved populations in our region.

<u>Cabarrus Family Medicine Residency</u>: The Cabarrus Family Medicine Residency Program in Concord has a total of 24 residents, eight in each of three years. The program graduated its first class of eight residents, in June 1999. This program is truly a "residency in a practice". Residents are assigned to one of our four full service family medicine practices for the three years of residency. To date the Cabarrus program has graduated 96 family physicians: 71% practice in NC, 39% practice in a rural area or small town, 9% provide maternity care, 9% are hospitalists, and 4% are on active duty with the USAF. In 2012 Cabarrus will offer a one year hospitalist fellowship program.

Greensboro AHEC: The Greensboro AHEC and the Moses H. Cone Memorial Hospital expanded the family practice residency program in the mid-1990's to eight residents in each of the three years for a total of 24 residents. Residents rotate in various surrounding rural areas for precepted experiences. In addition family medicine residents gain exceptional pediatric experience in an inner city clinic in Greensboro. The Family Practice Teaching Clinic is one of two clinics in the Cone Health system achieving Level 3 Recognition as a Patient Centered Medical Home. Evidenced based practice in a medical home model is the foundation of medicine the residents are learning and experiencing.

Mountain AHEC: MAHEC's Family Medicine Residency Programs in Asheville (33 residents) and Hendersonville (12 residents) provide an accredited, three-year, postgraduate education program for physicians wishing to specialize in family medicine. Also, MAHEC offers a one year accredited fellowship in Geriatric Medicine (2 fellows), Hospice & Palliative Medicine (2 fellows), Sports Medicine (2 fellows), and Obstetrics and

Gynecology (1 fellow). Their primary purpose is to improve the quality, quantity, and distribution of primary care physicians in Western North Carolina.

Southeast AHEC: New Hanover Regional Medical Center Family Practice Residency Program, developed in conjunction with UNC-Chapel Hill and Southeast AHEC in Wilmington, has a total of eighteen residents, six in each of three years. This residency was founded in the mid-1990's with the new funding AHEC received from the 1994 General Assembly, along with substantial support from New Hanover Regional Medical Center. Recent additions to the program include an increase of two residents per each year with funding from a HRSA federally funded rural residency training grant. The program is also dually accredited in both Allopathic and Osteopathic Family Medicine. Primary goals are increasing the supply of family practitioners in southeastern North Carolina, as well as improving the retention of primary care physicians. With additional foundation and federal funding, Southeast AHEC has developed special rural experiences for their family practice residents in selected regional communities.

<u>Southern Regional AHEC</u>: The Southern Regional AHEC in Fayetteville has a total of 24 residents. Its mission is to train physicians who remain in North Carolina, choose to care for the underserved, and includes a focus on rural medicine with structured experiences in rural communities. To meet these goals, recruitment is aimed at students with evidence of service to minority, rural, and elderly patients. Truly integrated, the SR-AHEC residency curriculum is an experience that emphasizes interprofessional and collaborative care in all areas of practice, including a Osteopathic Family Practice Residency, PharmD residency, and a Marriage and Family Therapy Residency located in a NCQA designated Patient Centered Medical Home.

<u>Wake AHEC</u>: The Wake AHEC, in association with the Department of Family Medicine at the UNC School of Medicine, has developed training opportunities for UNC family practice residents at Wake Med. There are rotations in numerous hospital-based subspecialties, including pediatrics, general surgery, pediatric emergency medicine, and obstetrics and gynecology. These rotations give residents experience caring for an underserved urban community in a busy technologically advanced medical center in southeast Raleigh.