



Annual Report

2013-2014



View from MAHEC Mary C. Nesbitt Biltmore Campus - Family Health Center



Mountain Area Health Education Center
ANNUAL REPORT
July 1, 2013 – June 30, 2014

TABLE OF CONTENTS

I. Introduction and Institutional Context of MAHEC

Introduction and Institutional Context2-3

II. Accomplishments in Core Services

Health Careers and Workforce Diversity.....4

Community-Based Student Training..... 5-6

Primary Care Residency Training.....6-10

Support for Practicing Health Professionals

Continuing Education Programs.....10-11

Practice Support Services.....11-12

Library and Information Technology.....13

III. Conclusion.....13

IV. Appendices

Initial Practice Locations for MAHEC.....14

I. Introduction and Institutional Context: 2013-14 has been a very productive year with significant growth and innovation, mostly in response to state and national trends in healthcare and partly as a result of growth strategies initiated in 2012-13. Primary challenges included the rapidly changing environment, the burdensome demands of clinical and educational documentation, and the diminishing financial support for health services and higher education. The summary described below is a synopsis of some of those changes:

Graduate Medical Education: MAHEC was awarded two HRSA sponsored Teaching Health Center grants allowing us to expand both the Asheville Family Medicine Residency Program and the General Dentistry Residency Program by two additional slots each. Both grants allow for expanded rural rotations in Tier 1 counties with significant needs. This brings MAHEC to a total of 3 Teaching Health Center grants including the Hendersonville Family Medicine Residency Program collaboration with Blue Ridge Community Health Center. Innovations in graduate education also included initiation of Centering Pregnancy and Centering Parenting programs in Ob/Gyn and Family Medicine, the establishment of an online peer-reviewed journal for students and residents to publish, efficient methods for measuring milestones, and placement of residents on key committees working on innovations in population health. Drs. Blake Fagan, Steve Crane, Arthur Ollendorff, Kiran Sigmon, Dan Frayne, and Robyn Latessa were newly elected into national and/or state leadership positions. Our close relationship with the UNC Eshelman School of Pharmacy continues to be positive, and we now have five clinical pharmacists practicing and teaching pharmacy and medical students and residents.

Undergraduate Medical Education: The UNC School of Medicine - Asheville Campus expanded to 20 students and now has 415 active community faculty. Asheville was chosen as the 2015 site for the International CLIC conference for medical educators leading schools with longitudinal curricula. Dr. Latessa continues to speak and publish on the successes of the program. The Sarah Graham Kenan Rural Scholars program continues to successfully recruit top rural candidates, and the Kenan Foundation recently awarded \$3million to support scholarships for these students and support the administrative infrastructure of the program. MAHEC was also recently awarded funds to double the size of the summer internship program with UNCA from ten to twenty to receive a health education experience during their summer break.

Population Health: MAHEC has assumed a leading role in transforming primary care in WNC. Recognizing the strength of the Regional Extension Center (REC) team and experience of the Family Medicine leadership team, Mission Health System entered into a contract with MAHEC to manage its twenty-six primary care practices. This has enabled MAHEC to double the size of the REC team and develop innovative programs to rapidly transform primary care. This included the expansion of integrated behavioral health, clinical pharmacy programs, team-based care, quality incentives, and numerous other innovations.

In addition, MAHEC has taken a leading role in establishing an ACO with now almost 300 primary care physicians and six hospitals. Long term, new means of payment for clinical services will be vital to WNC, and MAHEC specifically, to survive reductions in reimbursement and the growing impact of the uninsured. MAHEC continues also to be the primary means for recruitment of family physicians in WNC. There are now over 300 MAHEC graduates or faculty practicing in WNC, a clear success of the mission to train and supply the medical workforce for the region.

Regional Services: Regional Services has undergone a major transformation during the past two years. The structure of the team and scope of the programs has become much more responsive to the needs of healthcare professionals under the new leadership of Dr. Frank Castelblanco, Division Director. Frank has also established a partnership with the Buncombe County Department of Health that now contracts with the division to integrate public health and primary care education, engage the community around collaborative projects, and develop new programs for the region. MAHEC has three full-time MPH leaders for these initiatives. Under Frank's leadership, the division has begun to generate a positive margin after having a negative budget variance in the past three years.

Community Service, Advocacy, and Philanthropy: MAHEC provides clinical care for a large segment of the population with over 110,000 patient care visits a year in MAHEC practices and another 150,000 visits with its Mission Medical Associates primary care practices. Our combined practices care for the majority of the safety net population in WNC. We perform more than half of the 4,000 deliveries per year at Mission Hospital, administering both the obstetrical service, outreach service, and high-risk service for the Mission Health System. We are also actively engaged in clinical delivery services in partnership with the Asheville-Buncombe Community Christian Ministry (ABCCM) free clinic, the Buncombe and Henderson County Departments of Health, Smoky Mountain LME, Blue Ridge Community Health Center in Henderson County, the community of Lake Lure, and the UNC Asheville Student Health Service.

During the past two years, we have tripled the number of grants and contracts to provide services to almost \$4million per year. Our efforts to establish a philanthropic arm of MAHEC has enabled us to be more innovative and better promote activities and services to the community. Tina Owen and her development team have helped secure a

\$3million endowment for rural health, a \$1million planned gift for the medical school campus, numerous smaller awards to support student internships, centering pregnancy, global health, special projects for primary care practices and dental care, more than \$500,000 for the Family Health Center at Lake Lure, and \$150,000 of undesignated funds for MAHEC.

Challenges: Like most healthcare and educational institutions, MAHEC has numerous challenges. Budget reductions from the AHEC Program totaled more than \$1million annually over the past four years. The payer mix in WNC, and at MAHEC specifically, has continued to trend away from commercial insurance to government payers. Medicaid is now 46% of MAHEC clinical services. Only 24% is commercial insurance. MAHEC over the past 5 years has not been able to generate a sufficient margin and cannot keep up with needed salary increases.

As primary care practice is increasingly burdened with federal requirements, EHR documentation, quality reporting, ICD-10 implementation, etc., providers are beleaguered, teaching time is compromised, and learners are at risk of disillusionment about choosing primary care as a specialty. The insensitive timing of burdensome ACGME milestones on top of this adds to the challenge for educator clinicians. During a recent process of interviewing over 50 academic physicians at MAHEC, the burden of the EHR was listed as the number one frustration for faculty and the need for more time for clinical care and teaching was second. Although still citing academic medicine as a rewarding career, faculty feel their lives lack balance and are concerned about the pace of change and the future of medicine. MAHEC has a significant role to play in WNC in healthcare transformation, work force development, and health education. We have become an efficient, creative, and action oriented organization committed to our community and state. The challenges, although significant, are not insurmountable, and we continue to feel privileged to serve the region and state as part of the AHEC system.

II. Health Careers & Workforce Diversity

I. Health Workforce Development	OUTPUTS, OUTCOMES AND EVIDENCE
<p>Strategies to promote workforce diversity</p> <ul style="list-style-type: none"> Promote WNC job opportunities to underrepresented minorities Health Careers Education Awareness Conference and Future Leaders in Healthcare Conf Minority Medical Mentoring Program (MMMP) 	<ul style="list-style-type: none"> Provide opportunities 5-6 times monthly via MailChimp, FaceBook and Twitter. Over 2500 contacts per month. 453 participants for EAC and 29 participants for FLHC. 540 hours of mentoring and shadowing
<p>AHEC collaboration: special efforts to strengthen focus on integrating health careers programs:</p> <ul style="list-style-type: none"> HCDE has thirty-nine local, regional and national active and collaborative partnerships; including 2/4 year colleges and universities, and two outstanding advisory committees. <p>35 member Regional Advisory Committee (RAC) and fifteen member Minority Medical Mentoring Program (MMMP) Advisory Committee</p>	<ul style="list-style-type: none"> Collaborating partners provide a diversity of support; financial, volunteer time, , mentoring, precepting, workshops, in-kind support, talent resources, diversity and inclusion training, speakers, etc.
II. Programs	
<p>Projection of hours and number of programs, priorities for programs</p> <ul style="list-style-type: none"> Total pipeline HCDE programs > 20 Total pipeline program participants Total academic enrichment programs Total academic enrichment program participants Total participants health careers and future leaders conferences MMMP and CAYLA Internship programs Diversity Program participants Health Careers Academy 	<ul style="list-style-type: none"> 19 health career programs to provide exposure and awareness 956 pipeline participants 10 academic enrichment programs 391 participants in academic enrichment programs 482 participants 9 high school interns 119 diversity program participants 48 HCA students and 12 faculty
III. Statewide Collaboration	
<ul style="list-style-type: none"> NC AHEC Health Careers and Workforce Diversity (HCWD) Council Future Leaders in Healthcare Conference 	<ul style="list-style-type: none"> Collaborate to provide health careers and workforce diversity programming, including FLHC.
IV. Professional Development	
<p>Explore opportunities for professional development and scholarship</p> <ul style="list-style-type: none"> HCWD Council Retreat National Association of Medical Minority Educators (NAMME) Conference National and NC State School Board Association conferences 	<ul style="list-style-type: none"> Strategic planning for HCWD Council Professional developmental to serve and support minority disadvantaged students. Professional development to serve students and parents using best practices.
<p>Other Health Career Efforts</p> <ul style="list-style-type: none"> All NC AHEC funded awareness and structured programs will utilize a uniform survey tool. All program and participant data will be input into HCSETS. Develop parental involvement for each pipeline program. 	<ul style="list-style-type: none"> NC AHEC HCWD will collect data for input into HCSETS to determine outcome measures. HCSETS utilized to track and evaluate student data. All pipeline programs have a parental involvement component; summer camp, MMMP, FLHC and HCA.

FTEs in Health Careers

Please indicate the FTE effort (program staff and support staff) for AHEC Health Careers Initiatives in 2013-2014, regardless of funding source

Name	Job Title	FTE
Jacquelyn Hallum	Director Health Careers and Diversity Education	1.0
Kirstie Thompson	Program Coordinator	0.5
Total FTE		1.5

II. Community Based Student Training

HEALTH SCIENCE SCHOOLS

1. Work with AHEC affiliated, regional, and out-of-state schools, as appropriate, to place students:

ORPCE TRADITIONAL HEALTH SCIENCE STUDENT ROTATION PLACEMENTS:

Discipline	Number of Students				Number of Rotations				Number of Student Months				Number of Preceptors				Number of Sites			
	10-11	11-12	12-13	13-14	10-11	11-12	12-13	13-14	10-11	11-12	12-13	13-14	10-11	11-12	12-13	13-14	10-11	11-12	12-13	13-14
PT±	0	2	0	0	0	2	0	0	0	4	0	0	0	2	0	0	0	2	0	0
Dentals±	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0
NP	26	26	29	30	46	68	68	64	46	47	49	44.3	50	54	41	48	42	39	29	38
MD	89	83	85	82	131	118	120	121	70	60	61	69.2	50	41	48	42	37	29	34	27
PA	8	15	11	11	8	15	13	14	8	16	15	14.2	5	5	6	6	5	4	5	5
PharmD	40	57	82	82	126	157	183	196	126	157	183	194.3	43	55	60	71	19	22	24	31
Total	195	184	191	205	311	362	385	395	250	293	309	321.9	95*	155*	156*	167	63*	84*	93*	101

KENAN RURAL SCHOLARS: Summer 2013: 7 students completed 7 rural clinical placements with 6 weekly summer group enrichment sessions. Summer 2014: 5 students began 5 rural clinical placements with 6 weekly summer group enrichment sessions by 10 presenters offering 40 hours of programming.

UNCA UNDERGRADUATE SUMMER INTERNSHIP: 10 pre-med/pre-health undergrad students from UNC-Asheville completed 80 hours of clinical shadowing and 80 hours of project work on 10 different research and organizational/community projects at MAHEC clinical, residency, and community partner sites, including Mission Hosp

UNC SOM ASHEVILLE CAMPUS: 10 UNC MS3s completed the longitudinal curriculum in the Asheville Campus' 5th yr (2013-14). Over 200 community and hospitalist faculty preceptors (incl. 10 MAHEC FMRP and 8 OBRP faculty) provided 120 student months of teaching to Asheville Campus MS3s. For MS4s, there were 3 Critical Care months and 13 community months for a total of 16 student months for MS4.

PRECEPTORS:

1. Recruit new preceptors/practice sites

ORPCE: recruited 14 new preceptors (and 38 additional ORPCE preceptors were added by AHEC-affiliated schools).

KENAN UNC RURAL & UNDERSERVED SCHOLARS: added 3 new preceptors for 2013-14: Joan Queng, MD, (fmr MAHEC res), Robbinsville; Dorothy DeGuzman, MD, Celso; and Ben Stepp, MD (fmr MAHEC res), Bryson City.

UNC SOM ASHEVILLE CAMPUS: increased from 120-150 in 2012-13 to ~200 preceptors in 2013-14.

MAHEC/UNCA UNDERGRADUATE SUMMER INTERNS PROGRAM: brought in new project leaders, Jessica Annewalt, MD, Elizabeth Flemming, and Sarah Thach.

2. Preceptor Development

RURAL PROVIDER PANEL: Over 60 providers and students attended with keynote by David Mouw, MD, on experience as rural physician in Robbinsville and a panel discussion of rural providers moderated by Benjamin Gilmer, MD

ANNUAL UNC SOM EDUCATIONAL CONFERENCE: 55 longitudinal preceptors attended the UNC SOM Asheville Campus-sponsored annual educational conference on 9/17/13 focusing on Giving Feedback and Teaching Strategies for Medical Students. Seven (7) additional ORPCE traditional preceptors also attended.

STUDENTS:

1. AHEC student housing services

PRIVATE HOUSING (ORPCE): 11 community housing providers supplied 162.69 student weeks/40.67 student months

AHEC HOUSING (ORPCE & NON-ORPCE): MAHEC's owned/leased apts in Avl & Hvl provided 129.24 student months of housing for ORPCE & non-ORPCE students from 17 colleges and universities and the following

disciplines (Medicine, 39.23 months/44 students; Pharmacy, 11.9 months/11 students; Nurse Practitioner, 2.90 months/1 student; Nurse Anesthetist, .27 month/1 student; Nurse Midwives, 1.90 months/1 student; Allied Health, 58.67 months/25 students; Dental, 5.2 months/6 students; Public Health, .6 months/2 students; Genetic Counseling, 3.57 months/3 students).

TEACHING AT MAHEC FAMILY MEDICINE RESIDENCY PROGRAM

1. 20 traditional UNC MS3s taught for FM Clerkship at 9 WNC practices; core preceptors unchanged
2. 16 visiting traditional & (1) longitudinal MS4s from 12 schools (10 out-of-state). Of the 17 MS4s, 7 matched as 1st year MAHEC residents for 2014-15 (4 in FM-Avl, 2 in FM-Hvl, 1 in OB), continuing ORPCE's contribution to MAHEC residency recruitment by bringing in well-qualified MS4s for rotations

STATEWIDE COLLABORATION

Participate in statewide efforts, including: leadership roles, task forces, orientation

1. Gaye Colvin completed 2-yr term as ORPCE Statewide Chair in 12/2013

Pursue research evaluation and outcome measures and presentations relevant to community-based education:

1. The 2011 NC AHEC ORPCE Statewide Preceptor Study article was published in August 2013 (Latessa, R, Colvin, G, Beaty, N, Steiner, BD, Pathman, DE. Satisfaction, Motivation, and Future of Community Preceptors: What Are the Current Trends? *Academic Medicine*, Vol. 88, No. 08 / August 2013)
2. Heck J., Latessa R., Beaty N. The Third-Year Longitudinal Integrated Clerkship at the Asheville Campus of the University of North Carolina School of Medicine. *NCMJ* 2014 Jan/Feb;75(1):56-58.
3. "LIC in Time – A New Paradigm," NC AHEC Statewide Conference, Friday Center, Chapel Hill, North Carolina (December 2013)
4. "A Step Forward for Rural and Underserved Communities in North Carolina," NC AHEC Statewide Conference, Friday Center, Chapel Hill, North Carolina (December 2013)

MAHEC'S CENTER FOR HEALTH PROFESSIONS EDUCATION - COMMUNITY-BASED STUDENT TRAINING

STAFF:

Robyn Latessa, MD, Clinical Director CHPE, Asst. Dean & Dir., UNC SOM Asheville Campus

Gaye F. Colvin, MLIS, Director CHPE, Assoc. Dir., Curriculum & Student Affairs, UNC SOM Asheville Campus

Norma Beaty, MS/MEd, Director, Curriculum & Student Affairs, UNC SOM Asheville Campus

Jessica Poston, Program Coordinator, UNC SOM Asheville Campus

Jacquelyn Hallum, MBA/MHA, Director, Health Careers & Diversity Education (HCDE)

Lisa Keiber, BS, Office of Regional Primary Care Education (ORPCE) Director

Kirstie Thompson, ORPCE & HCDE Program Coordinator

Amanda Greene, MPA, Director, Kenan Rural Scholars and Undergraduate Internships

II. Primary Care Residency Training - Division of OB-GYN

Accomplishments for the Division of Obstetrics and Gynecology included:

Four PGY1 residents matched to the program. 328 total applications were received, 84 applicants interviewed and 64 applicants ranked on the match list.

PGY-1:

- Lindsay Capron, MD University of Washington School of Medicine - Seattle, WA
- Lauren Hill, MD West Virginia University School of Medicine – Morgantown
- Lindsay Janicki, MD University of Utah School of Medicine – Salt Lake City, UT
- Hollis Konitzer, MD MPH University of NC at Chapel Hill School of Medicine – Chapel Hill, NC

Four residents graduated from the program in June 2013:

- Richard Loftis, MD Associates in OB-GYN in Dalton, GA
- Elizabeth England, MD Angel OB-GYN in Franklin and Sylva, NC
- Nathaniel Jones, MD Oncology Fellow at Columbia/Cornell in New York
- Bennett Gardner, MD MFM Fellowship at Wake Forest University

Medical and APP Students: OB-GYN

107 Months

MAHEC OB-GYN Specialist started both Centering Pregnancy and NEST (New ob Evaluation and Support Time) groups in July 2013. NEST takes the place of a new OB appointment and allows patients to have a thorough introduction to the services offered in our Department, complete a comprehensive history form, and have a physical exam and ultrasound. The exam and ultrasound are done in a private setting while all other activities are done in a group setting. After this visit, patients are screened and triaged to an appropriate group depending on gestational age or screened due to risk factors. Centering Pregnancy is an empowering model of group prenatal care that allows women to spend extended time with their provider, share common concerns and learn together about caring for themselves and their unborn child during pregnancy. This model also ensures continuity of care, as the same providers stay with a group through their entire pregnancy which leads to both increased patient and provider satisfaction. To date, we in our 42nd Centering Group. We have completed statistical analysis from the first 18 groups with the following results:

- Reduction in pre-term delivery (before 37 weeks) from 9.6% to 7.6%, which translates to a medical cost savings of \$179,857.
- Reduction in low birth weight from 7.0% to 5.9%, which translates to a total cost savings of \$249,801.
- Team Based Care implantation has started in our outpatient setting. The initiative is to help providers become more efficient in the electronic medical record and patients are able to have a more one on one interaction with their provider.
- Implemented in-office procedures in an environment that is more inviting to patients and is a cost savings to the health care system. We currently are offering the following in-office procedures – Hysteroscopy, Hysteroscopy and D&C, ThermoChoice Ablation, Essure and Manual Vacuum Aspirations.
- The OB-GYN Faculty continues to serve in leadership positions and on committees at Mission Health System. 2013-2014 membership includes:
 - Dr. Kellett Letson is the Medical Director for Mission Women’s Health
 - Women’s Service Line Leader
 - Physician Executive Council
 - Mission Medical Administrative Committee
 - Physicians Information Committee
 - Quality Oversight Committee
- The Maternal-Fetal Medicine physicians are working closely with the neonatal physicians to facilitate birth transitions for newborns with anticipated special needs or hospice care.
- Recipients of two grant awards, TD Bank awarded \$10,000 for Centering Pregnancy and Perry Rudnick Foundation awarded \$6500 for a digital NST machine.
- Dr. Elizabeth Buys was the 2014 Faculty CREOG Award recipient.
- Dr. Suzanne Dixon was the 2014 Faculty APGO Award recipient.
- Dr’s. Allen Van Dyke and Carol Coulson were both awarded the Outstanding Faculty Teaching award by the OB-GYN Residents.
- Dr. Bennett Gardner was the recipient of the Faculty Best Research Project award for 21st Annual Resident Research Day.
- Dr. Andrea Currens was the 2014 Medical Student Award for Outstanding Faculty recipient.
- Charity Care:
 - Amount of donated indigent care to Project Access was \$84,971
 - Charity care for patients with limited income was \$123,186

Health Center Practices to Support Graduate Medical Education Programs:

Obstetrics and Gynecology	35,544- office visits 47,452 - Office services 1,869 - Deliveries and assists 1,087 - Surgeries and assists 2,547 - Antepartum services
Specialty Services	2,201- office consults 10,296 – Ultrasounds 3,102- Hospital ultrasounds 107 - Breast clinic services

II. Primary Care Residency Training – Family

1. Family Medicine Residency Program	Outcomes
	a. Faculty operate in both the inpatient and outpatient

<p>a. Operate both outpatient facilities and inpatient services to provide clinical teaching site.</p>	<p>settings. We opened our new family health center in July 2013, in which our faculty practice and precept the residents seeing their continuity patients. We provide a full spectrum inpatient service with a dedicated MD and PharmD faculty and delivered 234 babies last year!</p>
<p>b. Provide adequate teaching space, computer access and support staff for these teaching facilities.</p>	<p>b. Our new building provides a spacious work room for the residents, a large consulting area, and a series of classrooms and small group meeting rooms dedicated to Wednesday afternoon didactics. There are resident call rooms in the hospital. The clinical area has computer access with all inpatient and outpatient medical records web- based and accessible from any available computer.</p>
<p>c. Recruit residents who are highly qualified to succeed in a residency program and to successfully pass the national board examinations.</p>	<p>c. Key faculty and residents attend national and regional recruiting meetings, interviewing > 120 resident applicants per year. Qualified applicants from around the country are ranked based on the Board scores, class rank and Dean's letter, interviews by residency director, residents and group interviews and interactions with applicants during the interview.</p>
<p>d. Provide comprehensive inpatient and outpatient curriculum to fully prepare residents to address the competency requirements of the specialty and the ACGME.</p>	<p>d. Residents participate in the residency review committee during required inpatient rotations including surgery, OB, medicine and pediatrics. Residents follow continuity patients longitudinally through their 3 years of training and are expected to meet required milestones at specific times during the residency. The inpatient service is a full spectrum experience with busy pediatric and obstetrical experiences. We have strong medicine and geriatric experiences including coverage for our practice & 2 retirement communities and nursing homes.</p>
<p>e. Provide clinical and other experiences during the course of the residency training in order to expose residents to opportunities for practice in the region served by AHEC and elsewhere in NC.</p>	<p>e. Residents will have one of five rural experiences in each of their 3 years' of training, including a rural 25 bed hospital, Indian Health Service, a rural FQHC & a rural ER.</p>
<p>f. Engage residents fully in residency program and hospital efforts to improve the quality outcomes and effectively use electronic technology to improve care for the populations of patients serviced by the program.</p>	<p>f. Residents are required to participate in CQI teams which address clinic based quality issues. Third year residents facilitate CQI team meetings as well as present the work of the team at the end of the year.</p>
<p>g. Engage residents in research opportunities and other scholarly activities to augment residency training, to foster a focus on evidence-based practices, and to encourage incorporation of the latest research findings in clinical practice.</p>	<p>g. All residents are required to do research and have 2 years to work on a community/research project with help from faculty advisors and a research coordinator. Resident research has been presented at regional and national meetings.</p>
<p>h. Create opportunities for residents to teach medical students and other learners and to provide educational development opportunities for residents to allow them to increase their skills as teachers.</p>	<p>h. Residents have the opportunity to teach residents on all hospital services as well as in the clinic. The UNC School of Medicine- Asheville campus & the Office of Regional Primary Care Education provide multiple opportunities for residents to teach 3rd and 4th year medical students as well as pharmacy students through our affiliation with the UNC School of Pharmacy Asheville campus.</p>
<p>1.Program Highlights</p>	

Family Medicine Residency Program – Asheville

- a. We are teaching population health through didactics sessions and collaboration with the Buncombe County Department of Health and Human Services. Population health initiatives include our participation in the WNC Pediatric Obesity collaborative, and residents teaching “Tars Wars” an antismoking curriculum, to fourth and fifth graders.
- b. We have incorporated educational teachings from the book, "Brain Rules," into the weekly didactic lectures and are using a "flipped classroom" model to more actively engage the learners. We are also implementing 6-week "block themes" over the year in which we will discuss hypertension, Diabetes, Asthma/COPD.

Family Medicine Residency Program – Hendersonville

- a. The Hendersonville program completed its first year as a HRSA Teaching Health Center. A total of 10 residents participated in a continuity practice at either the Hendersonville Family Health Center or the Blue Ridge Health Center. The presence of two residency practices within community health center sites during the 2013-14 academic year has increased the volume of patients seen by residents, improved patient diversity, and greater participation in community outreach efforts. Beginning July 1, 2014 the Hendersonville program will welcome a full complement of 12 residents for the very first time.
- b. In June, 2014 Dr. Geoff Jones and Dr. Shannon Dowler presented the plenary presentation at the 2014 North Carolina Primary Care Conference in Cary, NC. They spoke about the first year of the Teaching Health Center, and their learnings along the way.
- c. We have completed a full year of implementation of our Program Evaluation Committees and Clinical Competency Committee, designed to help the program meet the new RRC requirements in effect July 1, 2014. The program is well-prepared to assess Milestones for each resident and utilize New Innovations more fully in the evaluation of resident performance.

Geriatric Fellowship Program

- a. Dr. Valerie Wilson joined the Fellowship Program from Wake Forest School of Medicine in June 2014. Dr. Wilson serves as the key clinical faculty member for the fellowship, Medical Director at Deerfield Retirement Community.
- b. Dr. Tim Plaut achieved AMDA certification as Medical Director at Givens
- c. Fellows Dr. Meg Dunay and Dr. Amanda Williams presented case study posters at the National AGS meeting and participated in the AMDA Future Scholars Program.

Hospice and Palliative Medicine Fellowship

- a. All graduates to date are working in Hospice and Palliative Medicine with 3 out of 5 in the region. 100% of graduates who have taken the boards have passed.
- b. The Fellows now participate in the one-week Intensive Course in Palliative Medicine taught by FourSeasons at the beginning of each year as a part of their orientation.
- c. Milestones evaluation has been integrated into the evaluation system.

Sports Medicine Fellowship

- a. Dr. Aaron Vaughan joined the faculty as Fellowship Director.
- b. The Program received notice of initial accreditation from ACGME, funding two Fellows, effective July 1, 2015.

Division of Dentistry

- a. Division of Dentistry served as a Dentistry in Service to Communities (DISC) training site for one UNC=CH fourth year dental student.
- b. Twenty-four AB-Tech dental assisting students completed their hands-on nitrous oxide training at our facility.
- c. Four Minority Mentoring students spent a week each shadowing the residents and faculty, learning about dental career options.
- d. Residents and faculty participated with the MAHEC OB department and their NEST program. We spoke to these small groups about oral health career for themselves and their soon to be infants.
- e. The dental division leadership was reorganized with the departure of Dr William Ryals. Dr Ed Coryell has assumed the leadership of the division as well as maintaining his previous role as director of the dental residency program.
- f. MAHEC residents, dental assistants and faculty participated in the AB-Tech Smile for Life day of giving. Multiple volunteers joined services to provide much needed care for low income and uninsured patients.
- g. Dr Jessica Oliver, a former MAHEC resident, joined the dental division as a full time faculty member.

2. Family Medicine Practices to Support Graduate Medical Education Programs	
<u>Family Health Center – Asheville</u>	
41,641	Office Encounters
4,476	Office Based Procedures
1,745	Behavioral Medicine Integrated Care Visits
2,290	Pharmacotherapy Visits- All Sites
5,133	Hospital Visits
<u>Family Health Center - Cane Creek</u>	
7,144	Encounters
<u>Family Health Center – Newbridge</u>	
3,230	Encounters
<u>Geriatric Clinic Visits at Givens and Deerfield</u>	
7,316	Encounters
<u>Family Health Center – Hendersonville</u>	
48, 288	Encounters

II. Support for Practicing Health Professionals – Continuing Education Programs

Continuing Education Work Statement
 The mission and goals of the NC AHEC Program are reflected in the broad spectrum of Continuing Education and training activities involving students, technology, consultation, and information services at the Mountain Area Health Education Center (MAHEC). AHEC, as part of Regional Services, conducts programs and activities, in cooperation with other educational and services institutions, which respond to local changes in health workforce needs.

Health Workforce Development	Outcomes & Evidence
A. Workforce recruitment and retention strategies for MAHEC: B. Incorporating Quality Improvement and Practice Management Initiatives:	A. MAHEC provided credit for 44 CME, 11 Dental, 19 Allied Health, 10 Public Health, 53 Mental Health, 20 Nursing, and 4 Pharmacy courses. B. Collaborated with CQI to provide programs: Risk Adjustment Factor, ABC's of CQM, Humanizing Healthcare Technologies – H2T.

Continuing Education & Technology	Outcomes & Evidence
A. Priorities for continuing education and technology in the coming year <ul style="list-style-type: none"> • Increase number of larger CME events by providing at least 1 national conference • Increase CME web/online offerings (e.g., videoconferencing, webinars, and live streaming). 	A. MAHEC CME executed a national Integrative Healthcare Conference with Dr. Dean Ornish – keynote, 230 participants. Webinar offerings and participation increased 20% over previous FY. Inter-professional CE

Student Initiatives/Academic Programs/Legislative Mandates	
A. Anticipate providing at least 2 CME courses, e.g. clinical skill-building simulation lab experiences, for UNC Family Medicine residents and area hospital medical teams. B. Incorporating Quality Improvement and Practice Management Initiatives	A. “Difficult Intubation” and “ALSO” programs provided for residents and regional providers in a simulation lab setting in collaboration with Mission. B. Nursing collaborated with CQI team to pilot and implement RAMP UP program.

Partnerships	Outcomes & Evidence
A. Regional B. Local	A. An 18-hour NC Dental Board-approved Minimal Oral Sedation training. 3 Day NCPTA Conference. Amputee Conference with VA. B. Contract with Buncombe County to incorporate public health staff into MAHEC to connect with primary care practices and initiatives.

Strategic Challenges

- a. Rebuilding CE Division and regional relationships. Offering relevant, timely programs that provide value.
- b. Collaborating with various Health systems and maintaining neutrality.

- c. Developing continuing education programs that anticipate regional needs - Physician Leadership Academy & Care Coordination Training.

FTEs in MAHEC Continuing Education - Please indicate the FTE effort (program staff and support staff) for the MAHEC Continuing Education Initiatives in 2013-2014, regardless of funding source.

Job Title	FTE
CE Planners & Director	6.8
Program Coordinators	3.0
Program Logistics	3.0
Total	12.8

II. Support for Practicing Health Professionals – Practice Support Services

Work Statement Goal/Area of Activity	Outcome
Develop and use Partnerships to promote and enhance the work of the quality initiatives (e.g., CCNC, public health, medical societies, MGMA, ACO[s], RHIOs and HIEs, AHEC program office, other practice support professionals, CCME, NC PATH, local & regional initiatives)	Met
Shared Learning & Knowledge Management (e.g., listserv, conference calls, online collaboration tools, milestone & discipline meetings, skills & needs assessments, workgroups)	Met
Delivery Model (e.g., on site facilitation, phone & email support, webinar/remote access, regional collaborative meetings, integration with other disciplines at MAHEC, workshops)	Met
Monitoring & Improvement (e.g., use of practice support data systems, tracking milestones, outcome improvement)	Met
Provider Engagement: providers live on EHR (Milestone #2) and meeting MU Stage 1 (Milestone #3); practices working on clinical improvement; and other fee based services.	Met

Highlights/Innovations – maintaining good relationships and engagement with a large number of diverse practices, apprenticeship site for a community college HIT training program, effective collaboration with local CCNC networks to support practices (e.g., training program to build practice capacity to do patient self-management/engagement), RAMP Up team based care training curriculum, part of regional ACO leadership team, technical leads/resources for MAHEC’s Quality Improvement & Informatics Council (guiding clinical divisions), helped encourage MAHEC to implement a QI incentive plan and dedicate more time to building staff capacity for QI (standing orders, protocols, pre visit planning, PCMH), brief (30-45”) presentations for “lunch-and-learn” webinars (plan to capture & make available as online learning modules), restructured team meeting process (to better track outcomes, rotate practice case study presentations, identify cross cutting barriers or facilitating factors), developed an Excel data dashboard for all practices receiving QI services showing change over time at provider and practice levels, effective use of Tableau data display software, identified three (3) team leaders (Data/EHR, MU/PQRS, and QI/PCMH) within our department (responsible for tracking caseloads, goals/outcomes, in-service training and staff capacity building, coaching and peer review, technical content matter expert, task supervision), building a process/tools to help practices align various programs (MU, QI, PCMH, PQRS, ACO readiness), co-founders/leaders of popular WNC Pediatric Care Collaborative (regional data warehouse, quarterly community meetings), effective project managers/consultants for PCMH, modeling team based care (we hired more junior staff, delegating more, cultivating areas of specialization, sharing more of the work)

Challenges – byzantine and barrier laden EHR data reporting systems, huge investment of time in building custom data reports that are wiped out by upgrades, limited capacity of practices to leverage EHR data functions (we must do it for them), overwhelmed & burned out practices (change fatigue), burn out among senior staff (regional travel, caseload), knowledge/expertise gap between senior staff and newer recruits (learning curve), communication & coordination among practice support staff (time for), “my practice” versus “our practice,” duplication of effort with local CCNC network’s practice support team, political infighting between HIEs hurts and confuses practices, being practical (how to make QI fiscally feasible, absent true payment reform), different approaches for working with health care systems/owned practices versus independents, general QI tools are often too academic & theoretical (practice cannot apply theory, need more specific guidance), need to create & offer more concrete tools (scripts for front desk to make outreach phone calls, very specific algorithms for CMAs), nursing background almost feels requisite to being an effective QI consultant, stretched between AHEC scope of work and increasing volume of contract work (MAHEC now manages all Mission owned primary care practices and our team, while larger in size, carries significant responsibility for the success of that management contract)

Evaluation – we track our goals & outcomes via team and department meetings and various databases, we collect client feedback surveys from practices at least annually, and other methods

II. Center for Healthy Aging

The mission of the Center for Healthy Aging (CHA) is to test and disseminate evidence-based health care programs in WNC to improve the health of older adults. The Center has initiatives in the areas of primary care practice redesign,

fall prevention, heart disease and stroke prevention, advance care planning, physical activity, high risk medication use, and community engagement. The Center has external funding for a variety of projects including: Heart Healthy program to merge public health case finding with enhanced primary care (The Duke Endowment—Landis and Thach); Innovative Aging using Clinical Pharmacists and nurse educator to deliver Annual Wellness Visits (The Duke Endowment—Landis and Thach); Boot Camp Translation to engage community people with our new medical practice in Enka Candler (Hartford Change AGent award—Landis and Thach); Using EMS and Home Health to Enhance Fall Prevention in Yancey and Mitchell Counties (Hartford Change AGent award—Queen); Advance Care Planning in Primary Care (The Duke Endowment—Landis and Stuart); CQI teams around physical activity and high risk drug use (Carolina Geriatric Education Center—Landis); and Using Public Health to Enhance Primary Care (Bernstein Fellowship—Thach). Our staff have presented at the American Geriatric Society and the American Society of Clinical Pharmacists and have published manuscripts in the Journal of the American Geriatric Society and Families, Systems, and Health.

This year we launch our inaugural volume of the MAHEC On-line Journal of Research, a peer-reviewed publication featuring original research and other scholarly works authored principally by a MAHEC learner. We published 2 issues of volume 1 : Fall and Summer.

<http://mahec.net/innovation-and-research/research/online-journal-of-research>

II. Library and Knowledge Services

The **MAHEC Online Journal of Research** was designed and created, in collaboration with MAHEC’s Director of Research and the Director of Marketing and Design, and **two issues were published** highlighting and making available our peer-reviewed learners’ research: <http://mahec.net/innovation-and-research/research/online-journal-of-research>.

MAHEC Library and Knowledge Services (LKS) added two important information resources: DynaMed clinical reference tool from EBSCO, and the Neonatal Resuscitation Program e-book from the American Academy of Pediatrics.

LKS collaborated statewide on AHEC Digital Library (ADL) collection subscriptions in support of regional needs, and actively participated in networks for inter-library sharing:

Usage of the ADL in MAHEC’s region increased by 13% over last fiscal year (21,983 sessions).

Delivery of material borrowed from other libraries increased by 16% over last fiscal year (827 requests).

Quality literature searching, consultation, and information services in support of clinical and administrative decision-making and services were continued by LKS. Librarian support for Quality Improvement efforts intensified considerably, with librarians becoming key members of clinical QI teams.

Service Interactions increased by 25% over last year (16,301 requests).

In-depth Consultation and Literature Searches increased by 19% over last year (1,037 requests).

The number of Proactive Alerts sent increased by 28% over last year (1,603 alerts).

The number of recipients of Proactive Alerts increased by 110% over last year (49,122 recipients)

Librarians provided training and curriculum support for residents, fellows, faculty and students – including participation in the annual curriculum development retreats for the FM Residency, and the “stumpers” training programs for residents and medical school students.

The number of educational contact hours increased by 22% over last year.

The number of orientation contact hours increased by 58% over last year.

Our two group study rooms were used often by a variety of students and professionals, with much greater usage this year by UNC SOMA students.

The number of reservations of group study rooms increased by 43% over last year

A Library Technical Assistant ordered, organized, and distributed textbooks to UNC SOMA students, saving local administrative staff considerable time. Service Interactions with UNC Medical School students and faculty continue to grow.

The number of service interactions with UNC SOMA students and faculty increased by 26% over last year.

Librarians provided information sharing services for ICD-10 webinar-based ICD-10 training courses, monitoring remote participant comments and relaying questions and answers.

Marketing and promotion are a challenge due to shrinking budgets and available time. However, LKS provided services to providers in every county in our region. The majority of services are to providers in Buncombe and Henderson counties, but **services to Community Faculty – preceptors of MAHEC residents, who are often also UNC preceptors, increased by 42%**.

Maps created by LKS were used by development, grant-writing, and research personnel, and in MAHEC publications.

Librarians provided content and wiki support for the RAMP-UP curriculum, the WNC Pediatric Collaborative, and the WNC Healthy Kids initiative.

Librarians actively participated in statewide AHEC ILS activity and meetings, and hosted the ILS Discipline meeting in the Fall of 2013.

Librarians and Library Technical Assistants helped to develop and participated in the Library Employees in Partnership (LEIP) group – a group of public and academic library employees in Western North Carolina created for exchanging

ideas about cooperative activities that might mutually enhance services or professional development opportunities.

II. Information Technology

At the end of the reporting fiscal year, some services were reorganized in the EdIT department. This included moving day to day support for campus audio-visual and distance learning activities, including videoconferencing, to MAHEC's Regional Services Division. EdIT staff was reduced by 2.0 FTE to accomplish this transition. Additionally, database programming and web programming was moved from EdIT to MAHEC's department of Marketing and Design. This resulted in a reduction of an additional 1.0 FTE. Positions eliminated in EdIT at the end of FY 2013-14 included a Technology Specialist I, Instruction Technologist, and Business Applications Programmer. Additions to the department include converting a temporary position into a Systems Engineer focused on network and VoIP management, and creation of a new Clinical Informatics Specialist position focused on EHR customization, reporting and meaningful use.

- a) Provided IT infrastructure in support of relocation of Family Medicine and Dental Health into their new facility in August of 2013 on the Biltmore Campus and facilitated a successful IT transition
- b) Planning and IT design for the new MAHEC Family Health Center at Newbridge practice, with successful opening
- c) Successful planning and migration of MAHEC's email system from Novell Groupwise to Microsoft Exchange Server and Outlook in November of 2013
- d) Implementation of synchronization of Outlook/Exchange with personal mobile devices
- e) Clinical Informatics support for Family Medicine and Ob/Gyn divisions specific to the implementation of quality measures, Meaningful Use, and PQRM using EHR reporting and customization
- f) Technical support in the implementation of a patient portal
- g) Development of recorded EHR training modules for providers, residents and staff
- h) Voice over IP (VoIP) phone system management and configuration; implementing changes to phone scripts in support of changing workflows
- i) Planning support for the implementation of two Health Information Exchanges slated to Go Live in the fall of 2014
- j) IT, data and phone service construction planning for the creation of two new clinical locations, Lake Lure and Enka/Candler, slated to open in the fall of 2014.
- k) Implementation of a migration plan that replaced full PCs and laptops with thin clients where appropriate; with associated continued development of MAHEC's virtual server and storage area network environment
- l) Implementation of Bring Your Own Device (BYOB) for students on rotation and certain other non-employee affiliates requiring network access
- m) Acquisition and setup of iPads in support of patient satisfaction surveys

III. Conclusion

The Introduction section of this document outlines the successes and challenges faced by MAHEC during the 2013-14 academic year. Investments in people, infrastructure and innovations during the year have already begun to have positive benefits. The first quarter of the 2014-15 budget showed a strong result from these investments with a positive budget variance of \$294,099, the strongest quarter for MAHEC in the past five years. All areas have shown positive expansion and new positions have been added. The biggest challenges this coming year will continue to be related to declining reimbursements for clinical care and the increased burden of documentation in the EHR for physicians and learners and implementing the new ACGME milestones. MAHEC remains committed to continuing our strong alliances with many community partners, especially Mission and Pardee Hospitals for GME and clinical care, the Buncombe County Health Department for safety net care, UNC academic departments, the Eshelman School of Pharmacy and Blue Ridge Community Health Center.

IV. Initial Practice Location for MAHEC

**Initial Practice Location for Mountain AHEC Based Residency Graduates
June 30, 2014**

Location or Specialty	Not Entering Academic/Fellowship			Entering Academic/Fellowship			Location or Specialty	Totals (Automatically Calculated)			
	North Carolina		Out-of-State	North Carolina		Out-of-State		North Carolina		Out-of-State	Total
	Rural	Urban		Rural	Urban			Rural	Urban		
Asheville Family Medicine	1	3	5	0	0	0	Asheville Family Medicine	1	3	5	9
Hendersonville Family Medicine	0	0	2	0	0	0	Hendersonville Family Medicine	0	0	2	2
Internal Medicine	0	0	0	0	0	0	Internal Medicine	0	0	0	0
Pediatrics	0	0	0	0	0	0	Pediatrics	0	0	0	0
Ob/Gyn	1	0	1	0	1	1	Ob/Gyn	1	1	2	4
Surgery	0	0	0	0	0	0	Surgery	0	0	0	0
	2	3	8	0	1	1		2	4	9	15