



NORTHWESTAHEC
Linking Education, Practice and Communities for Better Health

*Northwest Area Health Education Center (AHEC) of Wake Forest University School of Medicine
and part of the North Carolina AHEC Program*

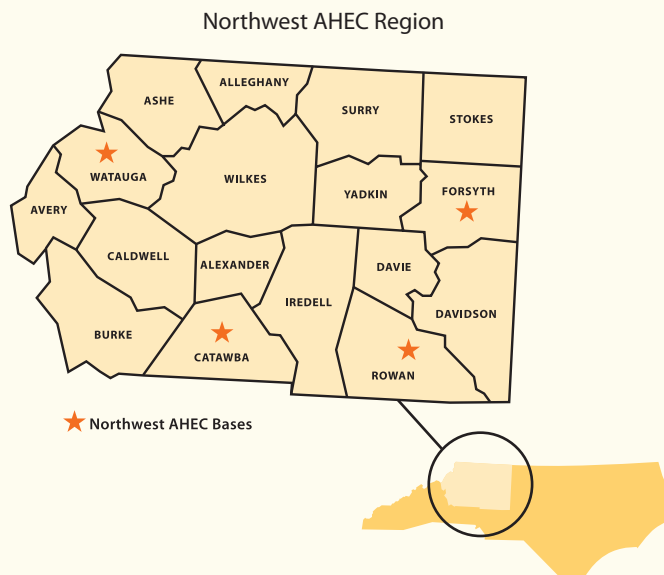


Mission Statement

The Northwest Area Health Education Center is an educational outreach center and training program designed to enhance the health of the public in its 17-county region by improving the supply, distribution, and quality of health and human service personnel—especially in primary care—through diverse community/academic partnerships.

Five Core Components

- Health Careers, Diversity & Recruitment
- Health Sciences Student Support
- Graduate Medical Education & Patient Services
- Continuing Education Activities & Services
- Information & Library Services



Northwest AHEC will continue to leverage resources based upon our Top Ten Strategies as well as our Guiding Objectives for Partnerships and Collaborations. Using process improvement methods, we will continue critical examination of our internal Northwest AHEC processes to determine the best ways to increase our efficiency and effectiveness.

Top Ten Strategies

- Develop a leadership and organizational culture of performance and accountability.
- Establish critical quantitative benchmarks and focus on achieving them.
- In addition to rigorous expense discipline, focus on pricing.
- Focus on higher-margin services and products.
- Do NOT allow mission to be used to justify poor performance.
- Balance focus on core services with development of new high-margin services.
- Proactively and aggressively address partnership issues—equity of partnership.
- Recognize quality as a key strategic imperative—make it a priority.
- Adopt new information technology.
- Increase capacity by first increasing efficiency; strategically add new capacity.

Guiding Objectives for Partnerships and Collaborations

All parties should strongly agree with the objectives for partnership:

- **Mission Alignment:** To honor and respect the individual missions of each organization while investing in the complementary missions to create a shared future.
- **Shared Resources:** To combine human and material resources where appropriate to enhance mission attainment, support ongoing programming, and initiate new programming. “Everyone brings something to the table.”
- **Shared Relationships:** To broaden visibility and value of each organization’s programming and community presence through the extension of existing relationships and the development of new relationships.
- **Mutual Benefits:** To expand and create opportunities that increase and improve the effectiveness of each organization with regard to mission attainment.
- **Leveraged Impact:** To enhance program results through leveraged resources, combined resources, and the development of new resources.
- **Measurable Outcomes:** To demonstrate effectiveness of programming toward mission attainment.

Opening Statement

The Northwest AHEC staff and I are very pleased to share our 2007-2008 Annual Report. For five consecutive years, we have had the opportunity to share our activities in this format with our partners and constituents in our 17 county region. We continue to experience growth and initiate new ideas in several of our core components. For example, on page 3, learn about an exciting pilot program in Health Careers, Diversity & Recruitment, which has the potential to increase the numbers of high school underrepresented minority students in higher level science classes. In Continuing Education & Services on page 9, learn about the new Nurse Educator Institute (NEI), which is a 60-contact hour online program to help community college nursing faculty meet their new credential/preparation requirements by the year 2010. Last and certainly not least, in Information & Library Services on page 10, learn about the major accomplishments of our Technology Team including the new and more user friendly website.

We continue to be able to focus on our mission and make strides toward its fulfillment with innovation—

primarily because of the relationships that we have with our excellent partners listed on page 13 and great support and guidance from our Boards of Advisors listed on page 12, from the senior leadership of Wake Forest University School of Medicine, from the NC AHEC program office, from the UNC Higher Education System, and from the North Carolina General Assembly. The Northwest AHEC staff and I continue to be energized by our accomplishments and many challenges of the future. We anticipate another extraordinary year in 2009, as it will mark our 35th anniversary which will certainly be filled with more opportunities to ensure a quality healthcare workforce in this northwest region of our state.



Michael P. Lischke, EdD, MPH
Director, Northwest AHEC



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Core Component 1:

Health Careers, Diversity & Recruitment

Grades K-12 Programs

The chart below summarizes activities for July 1, 2007 through June 30, 2008.

2007-2008 Northwest AHEC Health Careers Programs for K-12 Students

Type of Program	# Programs	# Hours	# Participants
Structured ¹	19	722	354
Awareness ²	182	126	12,490
TOTAL	201	848	12,844

¹ Structured programs are defined as programs involving more than one scheduled event, typically programs totaling over 20 hours.

² Awareness programs are defined as 30-45 minute, one-time programs. Programs/presentations conducted included the NW AHEC Puppet Bunch, CATCH, and Cool People, Cool Careers. School career fairs are also included.

Awareness Activities & Programs

Grades K-2: Northwest AHEC Puppet Bunch

- Conducted in schools.
- Utilization of multi-ethnic puppets dressed as healthcare professionals.
- Fun, engaging, and interactive way for young children to learn about health occupations.
- Provides a coloring book that captures presentation information.

Grades 3-5: CATCH (Catch A Totally Cool Healthcareer)

- Conducted in schools.
- Exposure to more in-depth and random selection of pre-chosen healthcare careers information.
- Utilization of medically oriented props and clothing.
- Provides a booklet outlining 11 health occupations, job descriptions/duties, clothing, and equipment.

Grades 6-8: Cool People, Cool Careers

- Conducted in schools.
- Exposure to more in-depth and random selection of pre-chosen healthcare careers information.
- Utilization of medically oriented props and clothing.
- Includes information about secondary education classes, post-secondary educational requirements, and earning potential for health professions discussed.
- Provides a booklet capturing presentation information.

Northwest AHEC provided technical and collaborative support for the following activities/programs:

- **The Winston-Salem/Forsyth County Egg Drop Competition** – Objective is to build a device to protect a raw egg as it is dropped, while minimizing device weight and number of parts, and land on a target; an annual community-wide event—a collaborative effort of the Greater Winston-Salem Chamber of Commerce and local biotech and engineering companies.
- **The “Sisters in Science” Annual Symposium** – Allows partnering with the American Medical Women’s Association chapter of WFUSM to provide opportunities for high school girls to interact with women in medicine and science.
- **The Winston-Salem Forsyth County Schools Science Fair and the Region 5 Science Fair** – Hosted by SciWorks; Northwest AHEC has continued to provide support for SciWorks, the winning students, and their science teachers; Region 5 includes the following counties: Alamance, Chatham, Davidson, Forsyth, Guilford, Person, Randolph, Rockingham, and Stokes.



Structured Activities & Programs

Rising 8th Graders: Project SEARCH (Student Education, Awareness, and Recruitment for Careers in Health)

- One-week summer residential opportunity on campus of Wake Forest University.
- Students exposed to Problem-Based Learning while using math, science, and health careers information.
- Northwest AHEC continued to collaborate with the Center of Excellence for Research, Teaching, and Learning (CERTL) and local school systems in its 17-county region.
- The 24 students who participated this year represented 11 of our 17 counties: Ashe, Alleghany, Catawba, Davidson, Forsyth, Iredell, Rowan, Stokes, Surry, Wilkes, and Yadkin.

Grades 9-12: Camp Med

- One-week summer day camp held throughout the 17-county region in various venues (schools, community colleges, hospitals, etc.).
- Students explore a variety of health professions and receive the NC Health Careers manual, which provides information for 88 careers.
- Camp Med activities were implemented in 14 counties with 274 participants this fiscal year.
- Northwest AHEC collaborated with local school systems and hospitals/medical centers in its 17-county region.

Grades 9-12: Future Leaders in Health Care (FLHC) Conference

- Weekend educational conference for high school students from across NC with an expressed interest in healthcare.
- Opportunity to learn more about health professions and post-secondary programs oriented toward careers in health.
- Program is implemented as part of an NC AHEC Program statewide initiative.
- A total of 16 students were able to participate in the FLHC Conference and represented the following counties: Burke, Davidson, Forsyth, and Surry.

Grade 10: CERTL/Northwest AHEC Biology Enrichment Program

- Rising 10th grade students who are identified as being at high risk of failing science classes are selected.
- Students attend 2 week College freshman biology lab on WFU campus and are matched with a WFUSM student mentor.
- Students must enroll in Honors Biology for 10th grade.
- CERTL/NWAHEC staff monitor students' progress throughout school year.
- Goal is to have students pass NC end of grade biology test.
- Students successfully passed the NC end of grade biology test.

Grade 11: CERTL/Northwest AHEC Chemistry Enrichment Program

- Rising 11th grade students who have completed the CERTL Biology Enrichment Program are selected.
- Students attend 1 week chemistry class at one of the local high schools and are matched with a WFUSM student mentor.
- Students must enroll in Honors Chemistry for 11th grade.
- CERTL/NWAHEC staff monitor students' progress throughout school year.
- Goal is to have students pass NC end of grade chemistry test.
- Results expected during June 2009.

CERTL/Northwest AHEC 9-12 Mini-Research Fellowship

- 6 week hands-on research program where students are guided by WSSU or WFUSM faculty.
- Students present their research in an end-of-program symposium.
- 18 students participated this year and were from the following counties: Davidson, Davie, Forsyth, Guilford, Stokes, and Surry.



Core Component 2:

Health Sciences Student Support



2007-2008 Northwest AHEC ORPCE Rotations and Housing/Student Type and Institution Number of Student Weeks¹ (Paid & Unpaid²)

	Duke	ECU	ECSU	UNC-CH	UNC-C	UNC-G	WFU	WSSU	Western Carolina	Methodist	Total
MD	23.4	9.4	—	155.0	—	—	657.0	—	—	—	844.8
PA	16.0	—	—	—	—	—	320.0	—	25.6	24.0	384.6
NP	92.3	73.9	—	71.4	132.2	148.0	—	217.0	—	—	734.8
PharmD	—	—	4.0	444.0	—	—	—	—	—	—	444.0
TOTAL	131.7	83.3	4.0	666.4	132.2	148.0	977.0	217.0	25.6	24.0	2,409.2

¹ A student week is defined as one student for one week (for example, four student weeks could mean four students for one week each as well as one student for four weeks).

² Some students are precepted by healthcare professionals who are not eligible for payment, such as Veterans Affairs physicians or those who are paid by medical schools.

The Northwest AHEC Office of Regional Primary Care Education (ORPCE) coordinated health profession students' community-based education activities as determined and organized by each of the school's curriculum for 2,409.2 student weeks with preceptors across the state. This year placements were facilitated for 10 schools. The students in these approved courses received free housing in rural areas, i.e., rent, utilities, etc. Funds were expended to pay preceptors for their services and to pay for recruitment of these healthcare professionals.

Other Accomplishments

- Northwest AHEC managed 11 apartments and worked with 18 host families to house students on community rotations, and all housing requests were met as in previous years.
- The highest housing demand came from WFUSM medical and PA students (977.0 student weeks) and 666.4 for UNC-CH medical, nurse practitioner and pharmacy students.
- Northwest AHEC continued financial support for the outreach nursing programs of UNC-Greensboro (Hickory) and Winston-Salem State University (Boone and Wilkesboro). A total of 53 students were enrolled during the past year. As of February 2008, a total of 302 students have completed the programs and graduated from UNC-G.

- Over 1,100 participants attended "Share the Health" Fair, a free annual health fair organized by Wake Forest medical students to serve the community by making basic health screenings and educational resources available to those who might not otherwise receive them. Of the attendees who participated in a follow-up study, 48% reported making a significant change in their health care regimen as a result of attending the fair. The most common change was a change in diet (43%) or an improved exercise routine (41%).
- Northwest AHEC also provided support to the WFU School of Medicine's Student National Medical Association (SNMA) chapter's annual banquet. Banquet proceeds help to defray costs of community-oriented projects initiated by medical students. SNMA is a nationally-recognized organization which focuses on the needs and concerns of medical students of color.
- We supported the *1st Annual Premedical Student Conference* hosted by WFUSM's Student National Medical Association (SNMA). The purpose of the conference was to increase the number of minority medical school applicants and matriculates to more accurately reflect the rich diversity of the communities in which they will ultimately serve. An estimated 98 students attended the conference and were premedical students of color in undergraduate institutions across NC.

Core Component 3:

Graduate Medical Education & Patient Services

For the fifth consecutive year, Northwest AHEC provided the financial resources and technical assistance to enable the primary care residency programs to offer the *Community Plunge* (a four hour cultural competency activity designed to provide an orientation to community demographics and healthcare resources) to incoming first year residents through its Community Health Partnership staff. The Physicians' Assistant Program (PAP) students participated for the second consecutive year. Interest in the community plunge concept has been strongly accepted throughout the Medical School.

The NW AHEC-supported Wake Forest University Baptist Medical Center's primary care and psychiatry residency programs graduated 61 physicians in 2008. Thirty of these new physicians (49%) have chosen to stay in North Carolina to begin their initial medical practice or to further their education in various fellowships. Overall, the 5 year cumulative average remains at 59%.

The following chart outlines the outcomes of the recruitment, graduation, and retention of these programs in addition to their service to the uninsured and underinsured in the community.

2007-2008 Northwest AHEC-supported Wake Forest University Baptist Medical Center Residency Training and Service to Uninsured/Underinsured Patients

	Family & Community Medicine	Psychiatry	Internal Medicine	OB/GYN	Pediatrics	Total
Number and % of Graduated Residents staying in North Carolina after June 2008 graduation	6 (60%) n = 10	4 (80%) n = 5	10 (36%) n = 28	3 (60%) n = 5	7 (54%) n = 13	30 (49%) n = 61
Number and % of Graduated Residents in North Carolina during 2004-2008 (5-year cumulative initial practice location data)	38 (76%) n = 50	18 (72%) n = 25	86 (57%) n = 151	12 (50%) n = 24	24 (46%) n = 52	178 (59%) n = 302
Racial/Ethnic Composition % of Total Residents and number in FY08						
African American	1 (3%)	5 (23%)	11 (12%)	1 (5%)	1 (3%)	19 (9%)
Latino	1 (3%)	2 (9%)	0 (0%)	0 (0%)	0 (0%)	3 (2%)
Other	1 (3%)	3 (14%)	7 (7%)	1 (5%)	5 (12%)	17 (8%)
Caucasian	27 (91%) n = 30	12 (54%) n = 22	76 (81%) n = 94	19 (90%) n = 21	33 (85%) n = 39	167 (81%) n = 206
Number and % of Graduated Residents employed in NC Public Mental Health Sector during 2004-2008	N/A	9 (36%) n = 25	N/A	N/A	N/A	N/A
Number of FTE Residents	29.5	26.0	94.0	19.0	39.0	207.5
Est. number of Indigent/Underserved Patients	7,389	960 ^a	8,449 ^b	1,873 ^c	16,847	35,518

a. Exact numbers from rural mental health clinics are not available

b. Numbers are through 6/20/08

c. Excludes outpatients.

Core Component 4:

Continuing Education Activities & Services

- Northwest AHEC implemented and accredited 2,048 continuing education activities for 35,857 registered healthcare professionals.
- Accredited by seven accreditation boards with capability of providing credits for 74 distinct types of healthcare professional CE.
- For FY08, total number of CE events increased 10%, attendance/participation increased 8%, and total number of hours increased 7% versus FY07.
- Online educational activities accounted for 156 activities (8%), 1,131 participants (3%), and 469 hours (7%).
- Online educational activities increased 22% (28 added) and hours grew 90% (222 added) versus FY07.
- Online growth in activities and hours due to planned broadening of interdisciplinary activities.

Community Health Partnerships

Community Health Partnerships staff has maintained a presence throughout the Northwest AHEC region to enhance the work of health coalitions and to link them with the resources of the NC AHEC system. We continue to have active consultative relationships with selected health coalitions in the region in the areas of resource identification, coalition building and maintenance, and designing community-based approaches to fit their identified health priorities.

Specific noteworthy projects:

- Co-sponsored the Forsyth County Health Summit which focused on health disparities and drew in more than 300 community members.
- Co-sponsored a conference with the Forsyth County Infant Mortality Reduction Coalition.
- Provided technical assistance to community coalition groups, including strategic planning with the Cancer Resource Alliance of Appalachian Regional Healthcare System.
- Continued to co-sponsor meetings with the Regional NC DHHS Healthy Carolinians/Health Education Consultant on the Coalition Coordinators' Network.
- Provided informal technical assistance to other coalitions on an ad hoc basis.

RN Refresher Program

The RN Refresher Program was started and developed in response to the nursing shortage of the late 1980s. North Carolina state funding was received so that the course would become readily available to all out-of-work nurses in the state. The model remains viable today around the state. The Northwest AHEC program continues to enroll students from our 17 county-region.

Of special note:

- As of March 31, 2008, our 53 enrollees represented an estimated 23% of the total nurses enrolled in the UNC-CH School of Nursing and NC AHEC RN Refresher Program.
- Since its inception, a total of 217 Northwest AHEC RN Refresher students have completed the didactic portion of the course which involves a full range of common nursing problems and is a medical-surgical review. The student must complete the self-paced course before beginning the clinical practicum.
- A total of 156 students have completed the clinical portion of the program which includes 160 hours of work within one of our regional partner clinical sites.
- Our program continued the partnership with the WFUBMC Simulation Laboratory. A total of 59 students participated this year and were exposed to varying patient scenarios, changing medical conditions and learned how to respond "on the fly" without any negative impact on real patients.
- We continued our collaborative partnership with WSSU School of Health Sciences where 86 RN Refresher students learned clinical skills in a series of laboratory workshops.



2007-2008 Northwest AHEC Continuing Education Activities & Services

Discipline	Type	# Activities	# Participants	# Hours
Allied Health	traditional/classroom	28	910	95
	online education	0	0	0
	total	28	910	95
Dentistry ¹	traditional/classroom	46	1,489	273
	online education	0	0	0
	total	46	1,489	273
Interdisciplinary ²	traditional/classroom	47	1,543	268
	online education ³	132	624	207
	total	179	2,167	505
Library ⁴	traditional/classroom	77	621	59
	online education	0	0	0
	total	77	621	59
Management/Administrative ⁵	traditional/classroom	42	800	357
	online education	0	0	0
	total	42	800	357
Medicine ⁶	traditional/classroom	1,440	21,450	3,466
	online education	1	1	15
	total	1,441	21,451	3,481
Mental Health	traditional/classroom	73	2,528	585
	online education	1	28	3
	total	74	2,556	588
Nursing ⁷	traditional/classroom	81	1,706	489
	online education	14	393	87
	total	95	2,099	576
Pharmacy	traditional/classroom	30	813	68
	online education	6	63	150
	total	36	876	218
Public Health ⁸	traditional/classroom	28	2,866	291
	online education	2	22	7
	total	30	2,888	298
Sub-total	traditional/classroom	1,892	34,726	5,951
Sub-total	online education	156	1,131	469
GRAND TOTALS		2,048	35,857	6,420

¹ Programs are co-sponsored by the WFUSM Department of Dentistry.

² Interdisciplinary data include activities developed for and marketed to Mental Health, Nursing, Physicians, Pharmacy, Allied Health and Public Health professionals.

³ Online education includes all online grand rounds registrations and includes many of the disciplines listed in footnote #2.

⁴ Library/Information includes ITG/Computer workshops/meetings and trainings conducted by medical librarians.

⁵ Management/Administrative includes educational programs such as the NCBH Six Sigma series, etc.

⁶ Through a partnership with the Office of Continuing Medical Education, the Northwest AHEC was able to provide assistance for CME credit to regional and affiliated hospitals/medical practices for their grand rounds/teaching conferences, tumor boards, and journal clubs.

⁷ Nursing "online" includes the new Nurse Educator Institute and the 12 NMI online courses coordinated in collaboration with Greensboro AHEC.

⁸ Public Health includes events originally defined as Quality Initiatives and Spanish.

Core Component 4:

Continuing Education Activities & Services *(continued)*

The Governor's Health Task Force Health Issues

During the past fiscal year, the Northwest AHEC Continuing Education & Services was able to meet the needs of its constituents, while also providing topics which address/focus on the most critical healthcare needs/issues of its region and the state as identified by the Governor's Task Force for Healthy Carolinians. Each program was assigned to one of the healthcare need/issue categories

based on the main focus of the training activity.

Seventy-eight percent or 2,993 of Northwest AHEC CE objectives addressed the most critical healthcare needs/issues as identified by the state. Following is a chart that summarizes the number of objectives from our activities and services that addressed the Governor's Task Force for Healthy Carolinians, in addition to others identified by Northwest AHEC.

2007-2008 Identified Critical Healthcare Needs/Issues Addressed by Northwest AHEC Continuing Education Activities & Services

Health Issue Categories	# CE Objectives Related to Health Issue	% of CE Objectives Related to Health Issue
1. Access to Healthcare	14	0.5%
2. Chronic Disease	1,871	62.5%
3. Community Health	127	4.2%
4. Disability	5	0.2%
5. Environmental Health	1	0.0%
6. Health Promotion	203	7.0%
7. Infant Mortality	59	1.9%
8. Infectious Diseases	60	2.0%
9. Injury	85	2.8%
10. Mental Health	405	13.5%
11. Older Adult Health	72	4.4%
12. Oral Health	91	3.0%
Sub-Total	2,993	78.0%
Additional Health Issue Categories		
13. Health Disparities	20	2.4%
14. Cultural Competency	33	3.9%
15. Women's Health	102	12.1%
16. Complementary Alternative Medicine (CAM)	21	2.5%
17. Leadership, Management, Education, and Communication	510	60.5%
18. Quality Assurance/Improvement	95	11.3%
19. Information Library Services	35	4.1%
20. Other	27	3.2%
Subtotal	843	22.0%
GRAND TOTAL	3,836	100%



Quality Improvement Initiatives

Northwest AHEC has continued its commitment to quality initiatives through activities and initiatives underway and in development which are summarized below:

- Northwest AHEC staff has been actively involved in the work of the NC AHEC Quality Task Force, setting the overall direction for quality initiatives across the state and developing tools and resources to support this work.
- The North Carolina Surgical Care Improvement Project Collaborative (NC SCIP) is a formal learning collaborative designed to improve the quality of care for surgical patients by reducing surgical site infections and complications. A Northwest AHEC staff member serves as a coach for three participating area hospitals and participates in all activities of NC SCIP.
- Supporting the Governor's Quality Initiative, Improving Performance in Practice (IPIP) is a collaboration of the Northwest Community Care Network, NC public health agencies, and NC primary care physician associations. The goal of the initiative is to give primary care physicians the tools, systems, and support needed to provide high-quality care. Northwest AHEC's Quality Improvement Consultant provides in-office technical assistance and consultation to improve quality of care, efficiency, and satisfaction for patients and the healthcare team.
- Six Northwest AHEC staff members participated in professional development related to quality initiatives. These staff members provided training to all Northwest AHEC staff about using the basic tenets of the Model for Improvement and selected quality improvement tools.
- A new quality improvement program, interfacing medicine and dentistry is currently being planned and organized by Northwest AHEC and led by the Dentistry Group. The project's objectives are to improve patient care and reduce risk for dental practices through a new comprehensive patient medical/dental history and examination. This pilot project, continuing through FY09, will likely involve participation with other regional AHECs.

Clinical Teaching Associates (CTA) Program

The Clinical Teaching Associate (CTA) serves as a clinical adjunct faculty member for a School/Program of Nursing and accepts responsibility for a group of students in a clinical rotation for one assigned semester at a time while remaining employed by the health care organization providing the clinical site for student learning. Northwest AHEC, in collaboration with Forsyth Technical Community and Winston-Salem State University, has provided training to CTAs since 2003. Forsyth Medical Center of NovantHealth and North Carolina Baptist Hospitals have played an integral role in providing nurses who are eligible for the program and for supporting these nurses in their workplaces.

- A total of 178 CTAs have received training as part-time clinical adjunct School/Program of Nursing instructors since 2003.
- Ninety percent of these adjunct faculty members are presently utilized.
- Reduced clinical group size leads to a greater ability to work one-on-one with students, increased student retention, and more complex student assignments.

Nurse Educator Institute (NEI)

A new online continuing education project, the Nurse Educator Institute (NEI), was launched in July, 2008. The NEI is a 60-contact hour competency-based curriculum that includes four online learning modules in addition to the **Northwest AHEC Best Practices Model**. It includes an interactive Nurse Educator Workbook (NEW) that incorporates professional readings, reflective practice exercises, critical appraisal strategies, curricula development exercises and other learning activities. The *NEW* will be provided to each participant via a flash drive (electronic copy) or "hard copy" workbook. This workbook will serve as a valuable reference for future study. The Nurse Educator Institute online program is designed to meet the North Carolina Board of Nursing requirements that "*all nursing faculty have preparation in teaching/learning principles, adult education, curriculum development, and program implementation/evaluation by the year 2010.*"

Core Component 5:

Information & Library Services



Building upon our 35-year tradition of classroom-based learning activities, the Northwest AHEC now offers several distance learning modalities including video conferencing, live web-streaming, on-demand webcasts, and custom-designed web-based courses. Our transition to provide a more direct line to additional health information and education, with an emphasis on the empowerment of clinicians, has led to even more clinicians actually using their acquired skills to access a wider spectrum of online healthcare literature and information.

Information Technology

Our eight-year partnership with WFUSM's Academic Computing and Information Sciences (includes Carpenter Library and Creative Communications) continually moves us into the forefront of distance education-based CE and enhanced library services. Listed below are the major accomplishments achieved this year:

- Developed and implemented online registration for the Department of Dentistry.
- Installed and configured video conferencing capabilities in the AHEC Directors Office.
- Procured, trained staff and implemented checkout procedures for new audience response system.
- Automated quarterly report preparation and transitioned to non-technical staff.
- Reconfigured T-1 communication lines to bases for maximum cost benefit.

- Developed and implemented the Course Generator: An educational event workflow application introduced to aid collaboration amongst coordinating teams and centralizes data for reporting.
- Provided streaming media support for Psychiatry, Internal Medicine, and Sports Medicine Grand Rounds.
- Redesigned the Northwest AHEC website that now provides a customized user experience, smart searchable courses, online evaluation and certificate retrieval, and a custom agenda builder.
- Implemented Northwest AHEC wiki for technical documentation of AHEC systems.
- Worked with a professional design firm to update Northwest AHEC graphical elements on the web and in print.
- Instituted new email marketing software, supported training, and helped develop documentation and policies.
- Received and processed 5,238 online registrations.

Website Activity

The following chart summarizes the level of activity that took place on our website for this past fiscal year. In general, our website is primarily accessed by individuals to obtain information about CE activity, which might be traditional (classroom), distance education (online), and other AHEC activities.

Total number of hits for fiscal year	1.89 million
Average number of hits/day	5,188
Total number of visitors for fiscal year; number of unique visitors	163,313; 42,621
Average number of visitors/day; average number of unique visitors/day	446; 116
Number of visitors who bookmarked website	33,684
Average time spent on website	4 minutes, 10 seconds
Top five most popular webpages	<ol style="list-style-type: none"> 1. Main website page/Northwest AHEC CE Events page 2. "Herbs and Dietary Supplements" course main page 3. NC AHEC Staff Directory page 4. "Think Cultural Health: Bridging the Gap through Cultural Competency CE Programs" course main page 5. Pediatric Mental Health initiative

Library Services FY08 Statistics

During FY08, Northwest AHEC Information & Library Services provided the following services to its 25 member institutions (healthcare and educational entities):

Element/Activity	FY07	FY08	% Change
Number of members	25	25	0%
Number of registered AHEC Digital Library (ADL) users	518	570	+10.0%
Document delivery requests ¹			
excludes base libraries	3,757	2,842	(24.4%)
base libraries (Catawba Valley, Rowan Regional & Watauga Medical Centers)	5,581	4,605	(17.5%)
total	9,338	7,447	(20.3%)
Interlibrary loans ²	161	111	(31.1%)
Site visits ³			
marketing, library consultation, visit	59	55	(6.8%)
classes	87	26	(70.1%)
totals	146	81	(59.9%)
Consults ⁴	2,744	3,965	+44.5%
Search requests ⁵	623	1,062	+70.5%
Base Libraries			
orientations	42	22	(47.6%)
classes	33	31	(6.15)

1--Materials checked out from library collection; items from library collection which have been used and reshelved; photocopies made by library staff from library collection.

2--Documents borrowed from a library outside of the Northwest AHEC Library system.

3--Site visits are meetings with Northwest AHEC institutional members for education, administration, promotion or consult purposes which are located away from WFUSM, Catawba Valley Medical Center, Rowan Regional Medical Center, and Watauga Medical Center.

4--Consults include telephone, email or in person; includes number of consultations to preceptor sites; categories of assistance can range from various types of technology assists to accreditation preparation, collection development, and training library contacts.

5--Search requests consist of in-depth database searches or reference questions that require at least 30-minutes to one hour to complete.

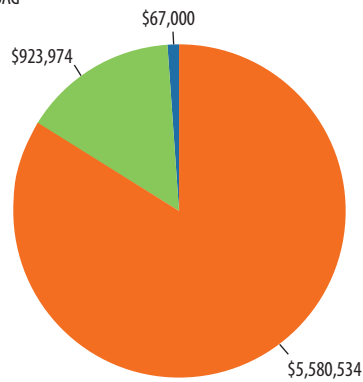
The preceding table represents the major services provided by Northwest AHEC librarians. The increases in requests have centered around consults and search requests. The number of registered regional healthcare professionals for the AHEC Digital Library (ADL) increased by 10% for FY08 versus FY07. Many of the services requested have experienced declines due to constituents finding other sources of information or doing simple requests on their own. Our ADL login data reveals that 570 regional healthcare professionals logged into the ADL 7,371 times during the fiscal year.

570 non-Northwest AHEC paid regional health professionals logged into ADL at least once			
	137	(24%)	people logged into ADL one time
	212	(37%)	people logged into ADL 2-5 times
	88	(15%)	people logged into ADL 6-12 times
	68	(12%)	people logged into ADL 13-26 times
	33	(6%)	people logged into ADL 27-52 times
Subtotal	538	(94%)	people designated as "light users" of ADL (less than one time per week)
	17	(3%)	people logged into ADL 53-103 times
	15	(3%)	people logged into ADL 104 or more times
Subtotal	32	(6%)	people as "heavy users" of ADL (more than one time per week)
GRAND TOTAL	570	(100%)	

Funding Sources and Expenditures

FY08 Funding Sources

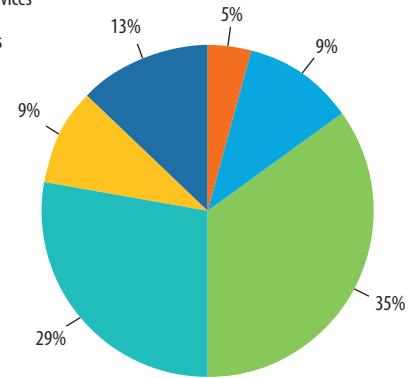
- Sub-Contracts from UNC Higher Education System & UNC Campus Projects
- Generated Revenue
- National AHEC Federal MSSAG



Total Budget: \$6,571,508

FY08 Expenditures

- Health Careers, Diversity & Recruitment
- Health Sciences Student Support
- Graduate Medical Education & Patient Services
- Continuing Education Activities & Services
- Information & Library Services
- Facilities & Administration



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Partners

Alleghany County Schools	Davidson County Health Department	North Carolina Arts for Health	Surry County Schools
Alleghany Memorial Hospital	Davie County Domestic Violence & Rape Crisis Center	North Carolina Baptist Hospitals	The Arts Council of Winston-Salem and Forsyth County
Alexander County Health Department	Davie County Health Department	North Carolina Center for Pharmaceutical Care	The Duke Endowment
Alexander County Schools	Davie County Hospital	North Carolina Department of Health and Human Services: North Carolina Division of Public Health and North Carolina Division of Mental Health, Developmental Disabilities and Substance Abuse Services	The Enrichment Center
American Council on Pharmaceutical Education	Davis Regional Medical Center	North Carolina Hospital Association and the North Carolina Center for Hospital Quality and Patient Safety	Thomasville Medical Center
American Institutes of Research	Duke University School of Medicine	North Carolina Infusion Nurses Society	Toe River District Health Department
Appalachian District Health Department	Elkin City Schools	North Carolina Medical Society	UNC-Chapel Hill School of Allied Health Sciences
Appalachian Regional Healthcare System (Blowing Rock Hospital, Cannon Memorial Hospital, and Watauga Medical Center)	Family Services, Inc. of Forsyth County	North Carolina Rapid Response Team Collaborative	UNC-Chapel Hill School of Dentistry
Appalachian State University	Forsyth County Department of Public Health	North Carolina Region 5 Science Fair	UNC-Chapel Hill School of Nursing
Applied Behavior Analysis Center of North Carolina	Forsyth, Stokes, and Davie County Medical Society	Northern Hospital of Surry County	UNC-Chapel Hill School of Pharmacy
Ashe County Schools	Forsyth Technical Community College	Northwest Community Care Network	UNC-Chapel Hill School of Public Health
Ashe Memorial Hospital	Frye Regional Medical Center	Northwest Diabetes Today Project	UNC-Chapel Hill School of Social Work
Avery County Schools	Gardner-Webb University	Northwest Pharmacists Association	UNC-Greensboro School of Nursing
BB&T Corporation	Greater Winston-Salem Chamber of Commerce	Northwest Piedmont Council of Governments	University of Virginia School of Medicine
Because We Care	Hickory Metro Higher Education Center	NovantHealth, Inc./Forsyth Medical Center: Department of Nursing and Department of Pharmacy	Veterans Affairs Medical Center
Blue Ridge Health Care	High Country Pharmacy Association	Office of Healthy Carolinians, State of North Carolina and individual Healthy Carolinians' Coalitions	Wake Forest University School of Medicine: Academic Computing and Information Sciences (Carpenter Library, Creative Communications and the Print Shop)
Blue Ridge Pharmaceutical Association	High Point Regional Health System	Office of Research Integrity, U.S. Dept. of HHS	Center of Excellence for Research, Teaching and Learning (CERTL)
Brenner Children's Hospital	Hoots Memorial Hospital	Piedmont Behavioral Healthcare (Local Management Entity)	Departments of Dentistry, Family & Community Medicine, Internal Medicine, Pediatrics, Physicians Assistant Studies, Psychiatry & Behavioral Medicine, Obstetrics/Gynecology and Public Health Sciences
Brody School of Medicine at East Carolina University	Hospice and Palliative Care Center of Winston-Salem	Piedmont Triad Partnership	Family Medicine Student Interest Group
Broughton Hospital	Hugh Chatham Memorial Hospital	Rowan County Health Department	Maya Angelou Center on Health Equity
Burke County Health Department	Iredell County Health Department	Rowan Regional Medical Center	Office of Continuing Medical Education
Burke County Public Schools	Iredell Memorial Hospital	Rowan-Cabarrus Community College	Share the Health Fair Student Committee
Caldwell Community College & Technical Institute	Iredell-Statesville & Mooresville Graded Schools	Rowan-Salisbury School District	Sisters in Science Program Committee
Caldwell County Health Department	Ironwood Community Institute (The Children's Home, Inc.)	Sara Lee Corporation	Student National Medical Association
Caldwell County Public Schools	J. Iverson Riddle Developmental Center	School Health Alliance of Forsyth County	Watauga County Schools
Caldwell Memorial Hospital	Kate B. Reynolds Charitable Trust	SciWorks	Western Piedmont Community College
Carolina Regional Heart Center	Lake Norman Regional Medical Center	Senior Services, Inc.	Wilkes Community College
Carolinas Center for Medical Excellence	Lenoir-Rhyne College	Shaw University Divinity School	Wilkes County Health Department
Carolinas HealthCare System (Grace and Valdesse Hospitals)	Lexington Memorial Hospital	Smokey Mountain Center	Wilkes County Schools
Carolinas Medical Center	March of Dimes of Northwest North Carolina	Southern College Health Nurses Association	Wilkes Regional Medical Center
Catawba County Department of Public Health	Mental Health Association in Forsyth County	Special Operations Response Team (SORT)	Winston-Salem/Forsyth County Schools
Catawba County Schools	Mental Health Association in North Carolina	Stokes County Health Alliance	Winston-Salem State University
Catawba Science Center	Mental Health Association in Stokes County	Stokes County Health Department	Women's Resource Center (Hickory)
Catawba Valley Community College	Mental Health Partners (Local Management Entity)	Stokes County Health Department	Yadkin County Health Alliance
Catawba Valley Medical Center	Mt. Airy City Schools	Stokes County Schools	Yadkin County Health Department
CenterPoint Human Services (Local Management Entity)	National Center for Complementary and Alternative Medicine, NIH	Stokes Family Health Center	Yadkin County Schools
City of Winston-Salem	National Library of Medicine, NIH	Stokes-Reynolds Memorial Hospital	
Community Care Center for Forsyth County, Inc.	NC AHEC: Program Office, Area L, Charlotte, Eastern, Greensboro, Mountain, South East, Southern Regional, and Wake	Surry Community College	
Cornerstone Health Care	NC Association of Free Clinics	Surry County Health & Nutrition Center	
Crossroads Behavioral Healthcare (Local Management Entity)	New River Behavioral HealthCare (Local Management Entity)		
Davidson County Community College			

** We have made every attempt to recognize and acknowledge our partnerships of the past fiscal year. We apologize in advance for any omission or error on our part.*



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