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**Innovative Programming/
Innovative Solutions**

Innovative Programming/Innovative Solutions

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Editorial Overview

Innovation Drives AHEC's Future

Kelley Withy, MD, PhD; and Shannon Kirkland, MBA

This is an exciting time for our country, and an even more exciting time to be affiliated with AHEC. America is considering sweeping changes in the healthcare system, growing disenchantment with the business and banking fields that will hopefully encourage more students to pursue science careers, and there is a renewed emphasis on teamwork, job development, and the critical role primary care plays in disease prevention and management. AHEC is poised for expansion. The fact that Senator Murkowski (R-Alaska) and past Senator Clinton (D-New York) both introduced bills to reauthorize AHEC demonstrates acknowledgement of the importance of what we do. NAO's continued refinement of data collection and measurement tools will further demonstrate the vital role of AHEC as part of a comprehensive health workforce development strategy for the country. By emphasizing the full range of AHEC involvement with underserved communities, including ways we have not touted in the past, such as partnering to build rural economies and create healthcare jobs, AHEC will flourish in the years ahead.

Every AHEC works closely with the communities in its region. We often work through unseen collaboration, and rarely brag about our success. But in the last fiscal year, the 47 AHECs who reported their activities to the National AHEC Organization Committee on Research and Evaluation (CORE) provided a total of 379,547 students with an introduction to health careers (less than 20 hours) and

AHECs provided health career experiences to over 412,675 students, health careers training experiences to over 44,675 students, and over 1 million hours of continuing education to over 346,287 providers. And that's just the tip of the iceberg!

conducted enrichment programs (over 20 hours) for 33,128 students. We trained 44,675 health professions students in 17,530 community-based training sites. We provided 1,160,178 contact hours of continuing education experiences to 346,287 health professionals. AHEC is the only national network promoting the

full health careers pipeline, and we are doing an excellent job. Much of the success is due to innovative approaches we pursue in our activities and our partnerships. We have taken the opportunity to showcase some of those in *The National AHEC Bulletin*.

For this edition of *The Bulletin*, the editorial board requested articles on innovative AHEC programming and activities. We received more articles than ever before, and in fact, twice as many articles as we could publish. Over the next few pages, Beth Landon, President of the National Rural Health Association, describes the four factors needed for successful rural economic development. Upon review of the articles we received for this *Bulletin*, we found that they all represented activities in one or more of the areas described. In fact, if you think about what your local AHEC does, you will see that we all either cover the four areas, or partner with organizations that do. So not only are we increasing the diversity, distribution, and quality of the health professions workforce, but we are building the workforce of rural and underserved areas. What we do makes a huge difference in underserved communities, so feel free to shout it from the rooftops (and to your Legislature).



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Innovative Perspectives Create New Opportunities

Beth Landon, MBA, MHA

The time has come for AHECs to look at their role in the community through the lens of job creation and economic development, the biggest issues facing our nation today.

Given the critical relationship between health status and the socioeconomic status of America's diverse populations, the National Rural Health Association's (NRHA) Multiracial and Multicultural Committee is finalizing a policy brief on economic development and subsequent recommendations. Several recommendations involve health workforce expansion in general and Title VII in particular. Much of AHECs' work with communities aligns well with these contributors to economic strengthening, underscoring that AHECs already have a vital role in the economic well-being of communities that they serve. To the extent that AHECs: 1) participate in promoting rural economic development efforts, and 2) document their efficacy to directly and indirectly improve our nation's most vulnerable communities, AHECs will have a greater impact and be better positioned to garner support in the current federal administration.

The organizing principle of the proposed NRHA policy brief is the promulgation of effective economic development in rural areas. Per the literature, Beaulieu (2002)¹ found that successful economic growth requires the systemic presence of four requisite and interrelated areas: *Education, Social Infrastructure, Entrepreneurship, and Public Infrastructure*. Investing in only a subset results in disjointed and one-dimensional efforts with dismal, although perhaps expensive, results. The need for such focused endeavors is greatest in communities and populations marginalized by geography, race, language, and culture—AHEC's target groups.

Education

The first area critical to economic development is *Education*. In addition to vibrant K-12 and university systems, this also includes job training for emerging sectors and educational instruction provided in languages other than English. Here's a painful fact: Although over the 1986-1992 period, college-educated persons were able to double their rate of employment in upper-tier primary-sector jobs and were able to expand their engagement in lower-tier primary-sector jobs

by 43%, non-metro minorities maintained their low rates of secondary and post-secondary education (Beaulieu, 2002).¹ Barriers to education compromised access to the jobs. Given that health care represents approximately 9% of our nation's jobs, and that communities marginalized by geography, culture, and race suffer a shortage of health professionals, strengthening the educational opportunities for health care in these populations simultaneously enhances the healthcare safety net and raises community employment by hiring locally. All AHECs directly provide or support activities in this arena and intentionally target individuals from disadvantaged backgrounds and those under-represented in the health workforce. Working with youth and non-traditional students, AHEC programming facilitates knowledge of and motivation to pursue careers in health care. Many AHECs also provide academic strengthening, mentoring, and some form of financial support. Recognizing the link between career preparation and economic development, AHECs are actively seeking ways to better track and document those individuals who pursue careers in health care, which is in perfect alignment with job training programs. The article by Flores and Danner on page 8 demonstrates the beneficial impact of pre-health programs, while Clark-Dufner, Gould, and O'Brien (page 10) describe a youth service track for health career students, and Covington (page 13) describes an effective method for program evaluation of educational experiences.

Social Infrastructure

Another economic development component is *Social Infrastructure*. Low-population densities in rural areas hinder the development of workplace supports and social infrastructure such as childcare, special health care, shelters, soup kitchens, and services that promote cultural awareness and cultural preservation.² Rural

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economic development initiatives often focus on prisons, toxic waste dumps, or animal confinement units. While these support large-scale low-wage employment, they can cause health and psychological problems, creating greater demand for social infrastructure programs which are already fragmented and underdeveloped. Many AHECs directly or tangentially support social infrastructure, often because they secure the necessary funding and are looked to in their communities for related programming. Some AHECs host or facilitate community meetings, health education activities, and health fairs. Other AHECs partner with rural health associations to develop infrastructure needed in their communities. AHECs can, should, and in many cases already do include social infrastructure agencies in their advisory boards, develop partnerships with them, and advocate for their role in community development and economic strengthening. Examples of AHECs building social infrastructure in this issue include Sabo, Jackson, and Shrader article (page 16) on targeted outreach education, and both the Aubrey (page 19) and Cunningham (page 24) articles on smoking cessation in Florida.

Entrepreneurship

Although AHECs are rarely considered entrepreneurial, AHECs create new programs and jobs across America. *Entrepreneurship* refers to the creation and growth of enterprises that provide new services or products, or add value to existing services or products. A substantial body of evidence suggests that the small business sector has yielded the bulk of new jobs in the United States.^{3,4} Given this record, entrepreneurship as a rural development strategy within low-income communities in the United States has continued to gain credibility.⁵ Such credibility has prompted government and donor agencies to expand funding for entrepreneurship development programs. Articles frequently appear in both the scholarly and popular media about the success of this “new approach” on incomes, employment generation, and social empowerment. Interestingly, this development strategy is perhaps the first major economic development paradigm to be applied to low-income areas in both developed and developing economies simultaneously.

Although entrepreneurship is not a traditional role for AHEC, there are notable successes such as the national dissemination of the Youth Health Service Corps program (Harrity, page 26) and using podcasting to advertise residency training (Stafford and Mantzouris, page 28).

Other AHECs build their infrastructure and jobs by performing important services such as workforce assessment as described by Cossman, Young, Silberman, and Harney (page 30). While AHECs should not feel responsible for leading the development of entrepreneurs, many AHECs already have strategic partnerships or Advisory Committee members with a function related to entrepreneurship, such as Workforce Investment Boards (WIB), Small Business Development Centers, local U.S. Department of Agriculture efforts, community development corporations, and banks. All AHECs should have solid relationships with these agencies, and entrepreneurship can be added to their discussions. AHECs that are seeking ways to facilitate entrepreneurship in their communities can access the Center for Rural Entrepreneurship (http://www.ruraleship.org/index_html?page=content/about_the_center.htm) and can include entrepreneurship in their advocacy efforts.

Public Infrastructure

The final area critical to economic development is strengthening of *Public Infrastructure*: the educational system, public transportation, affordable housing, technology, and healthcare services in particular.⁶ Through the provision of clinical rotations and CE/CME, AHECs play a direct role in influencing health professions students to work in our nation's most fragile healthcare systems, and aid in retaining them in those systems. Glasser et. al.⁷ and Morris⁸ have demonstrated that the location of training has a very strong impact upon where physicians decide to practice. Furthermore, Rotarius et. al.⁹ found that one physician in a community creates five additional jobs and brings in \$500,000 a year in revenue to the community. Thus, AHEC is directly responsible for building the healthcare infrastructure of our rural and underserved communities. Furthermore, AHECs across the country are helping to expand and improve services through activities such as creating new clinics for those most in need of care (Fournier and Todini, page 33), expanding the medical home model of care (Mengel, McIntyre, and Cole, page 35) and interdisciplinary care (Smith and Hambrick, page 39). Place, Joines, and Dickson (page 42) describe continuing education research that impacts communities and reduces professional isolation. These activities not only expand the public infrastructure for patients, but assist agencies in retention of healthcare workers,

Innovative Perspectives Create New Opportunities

strengthen local partnerships, and improve access to and quality of care in marginalized populations and areas.

Thus, AHEC plays a vital role in rural and multiracial/multicultural economic development, especially through education. However, program impact may be impeded where entrepreneurship, social infrastructure, and non-health public infrastructure are absent or underdeveloped. By encouraging the development of these arenas, and documenting AHEC successes in the context of health professionals trained and employed, AHEC can concurrently strengthen local economies, the healthcare safety net, and our own viability.

The current administration has emphasized its commitment to economic development in education and health. The creation of new economies is paramount to this administration's success and AHECs'. Members

of Congress are packaging and introducing a number of bills related to strengthening our nation's healthcare safety net and health workforce development infrastructure. As state and national indicators demonstrate, we are nearing the bottom of an extended economic recession, the new federal administration recognizes the tremendous need to invest in economic development, including education and health care. The challenge and opportunity for AHEC and our sister programs is to simultaneously link ourselves to job creation and the sustainment of the healthcare safety net in our nation's most isolated areas and underserved populations. Not only must we continue the excellent work we are doing, but we must continue a strong partnership with our legislators and alert them to how AHEC supports job development and education.

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Title VII Reauthorization: Behind the Scenes

Kathleen Klink, MD

Background: The Area Health Education program was last authorized by Congress in 1998, as Section 751 of Title VII. In 2007 the NAO Public Policy Committee, through a Re-Authorization Task Group, developed a re-authorization white paper which was approved as the NAO position for the future direction and sustainability of the AHEC program. The white paper was circulated among several members of Congress for consideration in developing health professions legislation. The white paper was also given to Senator Clinton's policy fellow. In 2008, Kathleen Klink, MD, joined the office of Senator Hillary Rodham Clinton as an RWJ health policy fellow to work on re-design of Title VII. Dr. Klink followed two previous fellows, both of whom worked closely with NY AHEC Deputy Director Mary Sienkiewicz on preliminary policy. From the beginning, Ms. Sienkiewicz has invited the NAO policy leadership to the table with then-Senator Clinton's policy staff.

by Kathy Vasquez, NAO Public Policy Committee

The following article is Dr. Klink's first-person account of her experience: First came the thrill. I arrived on Capitol Hill to work on then-Senator Hillary Rodham Clinton's (D-New York) legislative staff as a Robert Wood Johnson (RWJ) health policy fellow in January 2008. It was of course election year and health reform was high on the agenda. One of my many tasks was to create legislation to update health workforce policy and set the stage for the new administration and Congress in 2009. Senator Clinton, a health policy wonk herself, has an experienced legislative health staff and another fellow, so I was joining a team with deep resources.

Armed with my power suit, smart phone, and a mind abuzz after three months of daily health policy lectures, seminars, meetings, discussions, and briefings, I arrived in the stately Russell Senate Office Building to report for duty. On Day One, I was handed a well-thumbed brown paperback book about three inches thick in eight-point font: "Public Health Service Act," a briefing packet of materials including the Senator's policy overview, contacts, prior legislative drafts, and legislative process information. The assignment, as we had discussed when I applied for the position: Update Title VII legislation.

By Day Three there was pure fear: I had

no experience drafting legislation. I had no experience reading and interpreting legislation! I'm a family physician with 20 years working in poor New York City neighborhoods, attempting to develop family medicine in an Ivy League medical school at a quaternary care hospital. I had hoped the Washington-based fellowship could provide insight into pulling the right levers to effect positive change and health-care reform. Here I was, poised to make the difference, but how would I start and where was I going?

After the elation and the panic, I realized what I had to do. This is an account of how "The Health Professions and Primary Care Reinvestment Act" (S 3708) of the 110th Congress came into being.

Senator Clinton has consistently advocated for improved access to care, diversity in the healthcare workforce, and improved health care delivery. Goals include developing interdisciplinary healthcare teams and primary care. The policy interventions required to accomplish these seemingly straight-forward goals are surprisingly complex.

The Public Health Service Act has sections called Titles that authorize funding for programs such as the National Health Service Corps (Title III) and Medicare



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(Title XVIII). Federal support of health professions through Title VII funding began in 1963 with an Act that provided student loans and medical school facility construction to support the new Medicare program. Over the decades the emphasis of the funding for the programs shifted, and funding has waxed and waned with changing administrations and party majorities in Congress.

The current iteration of Title VII, known as “Health Professions Education Partnerships Act,” passed in 1998, authorizes programs to improve primary care, diversity in the healthcare workforce, and distribution of health professionals into under-resourced communities both rural and urban. Area Health Education Centers are authorized in Section 751 of Title VII. Other programs include primary care loans for medical students, physician assistant, primary care, geriatrics and dentistry training programs, public health and workforce monitoring support, among others.

The goal of reauthorizing legislation is to provide funding to move educational programs into alignment with what we currently know about good provision of care. Good legislation accomplishes several purposes simultaneously. By supporting innovation, encouraging new models, and retaining strengths of prior successful endeavors, good legislated policy will change current practice by providing grants that are restricted to grantees who are successfully moving toward specific goals, such as recruiting minority students into health professions, or aligning practice with the concepts of patient-centered medical homes, or incorporating quality improvement into educational activities

The current iteration of Title VII, known as “Health Professions Education Partnerships Act,” passed in 1998, authorizes programs to improve primary care, diversity in the healthcare workforce, and distribution of health professionals into under-resourced communities both rural and urban.

and practice reform. The challenge is to write the legislation so that it is specific, yet not so restrictive that different areas of the country, different health settings, or unique programs are unable to fit within the rubric of the guidelines.

The two major barriers for progress have been under-funding of the current statute and the need to streamline and update the statute to apply to current settings and programmatic needs.

The funding for Title VII programs has dramatically decreased

over two decades, particularly since more and more funds have been allocated to graduate medical education (GME) under the auspices of Medicare and Medicaid. This decrease has correlated with an exponential increase in graduate medical education funding—funding to teaching hospitals that have produced an increasing number and proportion of medical specialists, which some view as a core reason for soaring costs and decreasing quality of our health system today.

Writing Section 751, which authorizes funding for Area Health Education Centers (AHECs), represents a model of producing good legislation. The process included thoughtful review of current statute, evaluation of appropriate goals for future programs, assemblage of national expertise, and regular discussion with legislative staff to formulate specific, progressive, effective language. A good bill is one that has a reasonable likelihood of passing through the legislative process, including the introduction of a companion bill in the House, of committee vetting in the Senate and House, bicameral approval, and presidential signature into law.

The first challenge was to understand the implications and impact of current law. In

Title VII Reauthorization: Behind the Scenes

order to do that, I was referred to a constituent in then-Senator Clinton's state whose expertise and understanding of the legislation and the legislative process was invaluable. We started by assembling a meeting of statewide and national leaders from National AHEC Organization (NAO) for a Washington meeting in April. We created an agenda of priorities for new legislation, and established a team with both expertise and experience from the AHEC and legislative staff.

After the April meeting my role was to write the new Section, creating within the legislative language goals that would be consistent with the Senator's priorities and the senior legislative staff's understanding of constituent desires. By drawing upon the expertise of the NAO, new language would achieve specific new goals which are practical and achievable. Often there was congruency, but not always, and when there was not, discussion and research was triggered to amend the language to a point acceptable to all involved.

It's often said that nothing happens in Washington. There are many reasons for the perception. One explanation is that the bicameral system is designed to discourage changes in law. When there is a change, one can be sure that there is a tremendous amount of support by legislators, likely tempered by a tremendous amount of compromise. This adds to the stability of government, but also delays change when there is lack of consensus. Because so many perspectives and points of view are included to get to an acceptable proposal, "sausage making" is the term typically applied to the process.

By the fall, the power suit had become a pullover and the shoes of the comfortable variety. The smart phone was replaced by the laptop full of e-mails and notes and many drafts and rewrites. My buzzing brain was focused almost exclusively on making this bill work.

In September, I sent the first draft to the Legislative Counsel, whose task is to assure that the language is consistent and law-

ful before it is introduced to the Senate. Her response was that of all the legislation that comes across her desk—our bill was exceptionally thorough and appropriately formulated.

October came and went with many conference calls, new drafts, expert review, and feedback. The election was nearing and it was unclear how much time we had to introduce the bill prior to Congress going out on recess until after the New Year.

The thrill returned on November 20th when we took the underground shuttle from the Russell Office Building into the Capitol, walked past the Ohio Clock, and handed the bill to the clerk at the Senate cloakroom, where it would be processed for introduction.

After my experience, I offer the following to organizations advocating for their cause, with the hope to move the legislative process:

Levers to pull for change:

- Know your representatives and relate to them and their staff regularly;
- Know the current issues and keep abreast of the political climate that may allow a particular bill to "move" due to bipartisan agreement on a topic;
- Form coalitions and partnerships—sing the same song (in harmony) so that staff hears a similar concept again and again;
- Create a cadre of expertise within your interest group and make these experts available for consultation when needed.
- Things move fast and unexpectedly. When windows of opportunity open, be ready to jump through them.

I would like to offer a special thanks and recognition to Michael French, Beth Landon, and Mary Sienkiewicz who worked tirelessly sharing their expertise, insight, and patience.

West Texas AHEC: Engaging Students in Community to Make Better Health Professionals

Loni Marie Flores, MEd; and Pam Danner, MBA

Background

Since 2000, student affairs administrators have been examining the learning process within higher education and have been evaluating the graduates of the program.¹ For example, are their graduates adequately prepared to enter the workforce? Are they being recruited? Do they have the social skills that are needed to be successful within their positions?

There is a new generation in the classroom—the Millennials—those individuals born between 1980 and 1994. Like other generations, Millennials are shaped by the events, leaders, developments, and trends of their time. Higher education has to take on new meaning by considering new learning and service strategies, rethinking student development theories, and modifying education environments.²

Developing Collegiate Programming

Six years ago, West Texas AHEC developed the Student Rural Health Organization to encourage undergraduate, undecided and health professions-major students into a rural-focused career track. In 2004, the expanded organization, on the Texas Tech University Health Sciences Center and Texas Tech University campuses, was renamed the Double T Health Service Corps. The organization helps foster the interest and professional development of more than 100 pre-health professions students annually.

The West Texas AHEC Program has initiated this type of collegiate programming with the concepts of millennial engagement at its core. Millennials place more emphasis on self-examination as a way to learn inside and outside the classroom than previous generations. It is important to create a seamless learning environment as they learn about themselves and their professions. Millennials are more involved in extracurricular

activities as part of their academic experience; these organizations (especially those related to careers) can aid as an outlet for students to gain hands-on experience, network, and perhaps help them find mentors. Particular emphasis has been placed on bridging the gap between AHEC's traditional work to promote health careers to K-12 audiences and work to support current health professions students in clinical rotations. There was a need in West Texas to assist undergraduate students in health careers decision-making and preparation. Few area college campuses have the resources to provide programming that links college coursework and career advising with community involvement and peer relationship-building in a format that creates support for students as they determine and pursue their career goals.

A unique component of the organization is that it offers the opportunity for pre-health students to participate in interdisciplinary service and professional development activities, alongside current health professions students. It gives them the opportunity to be actively engaged in identifying and meeting needs in their own communities as well as seeing the impact they can make through service. The objective is to connect students to communities in the region, creating relationships that may turn into future practice opportunities and giving them valuable service experience to include in the application process.

Undergraduate membership from fall 2007 to fall 2008 has more than doubled; students see the hands-on value that the organization offers for their development. Damon Sneed, a pre-nursing freshman, said, "Being involved with the Corps allows me to make an impact by serving the community and allows me the opportunity to interact with students already taking nursing classes." Kelsey Kelso, a third-year medical student, said, "I have been



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a member for six years and love it. I've been able to form relationships with people who share the same passion for healthcare and working with the underserved."

In fall 2007, students planned and participated in 33 hours of community service programming and over 100 hours for the year. This fall, there has been a 70% increase in service activities, with more than 56 hours of programming completed in the fall semester. The students established four priority areas for their work to improve community health:

- Facilitating health promotion,
- Mentoring youth/career development,
- Addressing health disparities in underserved populations, and
- Improving communities.

Some recent student-led projects include mentoring at-risk elementary students who have a parent that is incarcerated; facilitating campus-wide drives for food and for teddy bears to meet the needs of local community organizations providing services to children; and hosting activities to promote health careers to high school students and to promote good nutrition and physical activity to children in rural communities.

For the West Texas AHEC, the organization affords the opportunity to engage a previously un-served student group in a format that meets their needs. It creates a mechanism for AHEC to track students through the transition from high school through undergraduate pre-requisite training into health professions education and then into the workforce. In addition to face-to-face meetings, tools that include a Web site, e-mail, Facebook page, and phone texting are used to better engage and connect students to the organization.

Our previous work with area colleges and universities indicates there is interest in and the desire for programs that will engage undergraduate students in these types of organizations and activities as a retention strategy.

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With lessons from successful implementation at Texas Tech, West Texas AHEC is expanding this student organization concept to other community college and university campuses in the service region. In September 2008 the Pioneer Health Service Corps was established at Wayland Baptist University by AHEC of the Plains and Luke Ingraham, a student champion who had been involved with AHEC's high school Junior Volunteer program at the hospital in rural Plainview. When he started college, he noticed there was very little support available for students seeking to pursue health careers. He came to AHEC of the Plains to help them establish a student group. By mid fall, the Pioneer HSC had 65 members.

Strategies for Engaging College Students

There are some specific strategies for establishing and effectively working with student organizations on college campuses, including:

- Find a faculty or staff member to serve as an advisor and champion.
- Collaborate with community and campus partners to support student linkages into the community
- Develop service projects, with student input, that give students opportunities to see the immediate impact of their efforts.
- Facilitate undergraduate students' access to resources that can foster their preparation for health professions training.
- Communicate in ways that are relevant to students' needs.

The Corps members confirm that being engaged within the community is a rewarding experience for everyone involved. Dr. Heath Cotter, a resident physician who has signed to work in a frontier county, says, "Double T Health Service Corps played a large part in confirming my work with the underserved." These students will be the future health professionals who serve the West Texas region and will most definitely make an impact on the communities they will serve.

The University of Connecticut Urban Service Track: An Effective Academic- Community Partnership

Petra Clark-Dufner, MA; Bruce Gould, MD, FACP; and Kara O'Brien, RN

The University of Connecticut's Urban Service Track (UST) is a unique academic-community collaboration with a focus on training health professions students to provide care to underserved patient populations in Connecticut's urban centers. Created and supported by the Connecticut Area Health Education Center Program (CT AHEC), which is located within the University's Center for Public Health and Health Policy, the UST is quickly becoming a destination program for current and prospective health professions students interested in primary care.

Now in its second year of operation, UST has 54 students enrolled. Designated as Urban Health Scholars, UST participants are full-time enrollees in one of the university's schools of Dental Medicine, Medicine, Nursing, or Pharmacy. Students come from the Storrs and Farmington campuses, which are 40 miles apart. The primary service area for Urban Health Scholars is Connecticut's capital, Hartford, which has a population of 124,397 and the dubious distinction of having the sixth highest child poverty rate among United States cities of 100,000 or more residents. Two students have graduated from UST since its inception, and both are working with underserved patients, one in Connecticut and one in North Carolina.

What is UST?

Modeled on the "rural physician" training programs formulated by several medical schools in the 1970s, UST identifies students interested in working with diverse patient populations in underserved urban communities. The CT AHEC Program is the fiduciary agent and home for UST. Its mission to bring academic and community partners together to address health dispari-



National Kidney Foundation Kidney Early Evaluation Program (KEEP) screening in Waterbury, CT. (Daniel Morris (SOM-2) and client).



Urban Health Scholars at the UConn Migrant Farm Clinic in Windsor, CT. Hassam Sultan (SODM-1), Kevon Rennie (SODM-2), Natalia Sanchez (SODM-1), patient and Ruth Goldblatt, DMD, FACP precepting.

ties supports Urban Health Scholars by providing real-world applications in one of Connecticut's poorest urban communities.

Urban Health Scholars are at various educational levels, including undergraduate and graduate students in the Schools of Nursing and Pharmacy, first- and second-year dental and medical students, and residents in Family and Internal Medicine. Approximately 1/4 of the students come from underrepresented populations and several come from urban underserved communities. Urban Health Scholars are united by three common principles: 1) a desire to work with diverse underserved patients, 2) a proven track record of volunteerism,



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Faith Congregational Church community health fair, Hartford, CT. (Ana Martinez (SOPH-P3) and client).

and 3) a desire to learn from and work with interprofessional teams of health care providers.

As an “add-on” program to students’ curriculum within the four schools, the Urban Service Track provides participants with enhanced learning opportunities. These include bi-monthly learning retreats featuring community clinicians, social service agency representatives, and faculty mem-

bers from the University of Connecticut as well as their clients and patients. Over the course of two years, Urban Health Scholars are introduced to 11 competency areas which include health care financing, advocacy, population health, health disparities, cultural humility, quality improvement and patient safety, interprofessional team building and leadership, and utilization of community resources. The competencies were identified in partnership with the Community Health Center Association of Connecticut (CHCACT) by surveying practicing clinicians who provide care to underserved urban patient populations.

At learning retreats, students are introduced to different vulnerable patient populations to enhance their knowledge and understanding of health care issues and barriers specific to that population. Urban Health Scholars see the curriculum and facilitators as providing valuable information and perspectives on “in-the-trenches” health care and services.

Programmatic Elements

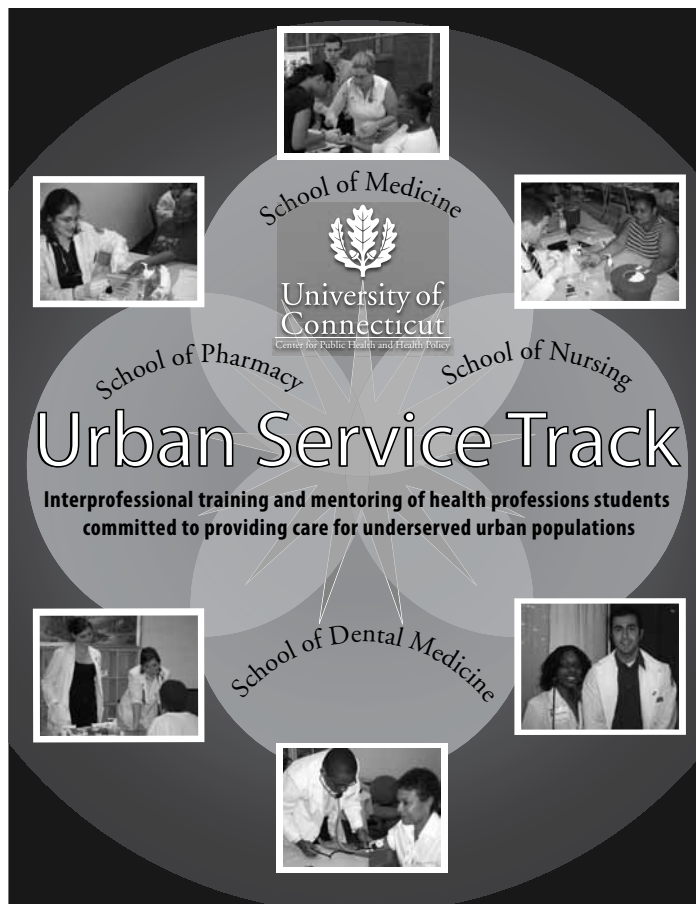
Urban Health Scholars are placed at community health centers and/or community health agencies with diverse patient populations through their respective schools. This provides participants with a common clinical experience from which they can approach care for the underserved. Urban Health Scholars also plugged into a menu of community volunteer activities. All students are required to attend quarterly learning retreats and participate in two community service activities during the fall and spring semesters that may include: National Kidney Foundation’s Kidney Early Evaluation Pro-



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Bruce Gould, MD, FACP, is the Director of the Connecticut AHEC Program, Associate Dean for Primary Care at the University of Connecticut School of Medicine, Medical Director of the UConn/St. Francis Primary Care Center at Burgdorf/Bank of America Health Center, and the Medical Director of the City of Hartford's Department of Health and Human Services.



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gram (KEEP), health fairs and screenings, health prevention and promotion activities during National Primary Care Week, and participation in the Mission of Mercy, a free mobile dental clinic.

Learning to advocate for vulnerable populations is key to the UST experience. Urban Health Scholars participate in the annual National Association of Community Health Centers' Policy and Issues Forum held in Washington, D.C. that includes a day on Capitol Hill.

Coordinating schedules and facilities for students at different educational levels from four different schools and two different campuses is challenging. With the addition of a second cohort of Urban Health

combination of university and extramural funding. As financial resources at the university and the state continue to constrict, UST will need to be more creative and aggressive in identifying funding to support the program. The Center for Public Health and Health Policy provides financial support for program personnel and the four schools provide in-kind support for key faculty representatives/advisors for the Urban

Service Track. Community partners provide stipends for students participating in six-week community research projects, use of facilities at no cost, and frequently support meals and refreshments at the learning retreats. Additionally, funding from several foundations supports the program.

As part of future funding strategies, the Urban Service Track will diversify dollars supporting the program and integrate successful curricular components into the mainstream curriculum of the four health professions schools.

Conclusion

Originally the University's Urban Service Track was conceived as an enrichment program designed for 12-16 students enrolled annually (3-4 per school). During UST's first two years of operation, the number of applicants and student participants has more than doubled. This may be due to timing, the increasing awareness to recruit and train primary care providers, the realization by health professions students that they need a "toolbox" that better equips them for working with underserved patients, or any combination of these factors. As successive cohorts of Urban Health Scholars participate in UST, we will continue to evaluate program elements to see if this unique academic-community partnership is feeding the pipeline for primary care providers committed to working with urban underserved populations.

...the increase in participation by health professions students may be due to their realization that they need a "toolbox" that better equips them for working with underserved patients...



Urban Health Scholars at the 2008 National Association of Community Health Centers' Policy & Issues Forum. Left to right, Petra Clark-Dufner (UST Director), Jessica Johnson (SOM-2), Nick Calabres (SON), Lisa DiFedele (SOM-1) Daniel Morris (SOM-2), Kara O'Brien (SON), Cheryl Bilinski (SOM-2), Jennifer Jaskolka (SODM-2), Ana Martinez (SOPH-P3), Kevon Rennie (SODM-2), Melissa Mangini (SON), Bruce Gould, MD (CT AHEC Director)

Scholars in fall 2008, the number of learning retreats doubled, creating additional demands for facilities and speakers. Community leaders and University and UST faculty responded with added commitment to the program.

The Urban Service Track is supported by a

Charlotte AHEC: Evaluating For Program Quality and Effectiveness

Julie Covington, MS, RD, LDN

As today's healthcare organizations focus on quality care and improved patient outcomes, quality staff training has become essential in keeping staff knowledge and skills updated. Coupled with our economically challenged environment, ensuring the quality and effectiveness of continuing professional education (CPE) programs is vital as employers face tighter budgets for CPE and limited staff time available for travel. With financial and time constraints, healthcare professionals must make careful decisions about which programs will effectively update their technical skills and in turn improve outcomes for their patients. The Area Health Education Centers (AHECs) are known for providing quality, timely, and cost-effective training opportunities for healthcare professionals in their regional settings. With increased need to prove effectiveness through outcome and performance measures, AHECs need to

With increased need to prove effectiveness through outcome and performance measures, AHECs need to examine their program evaluation methods to ensure they are obtaining the data needed to document that their programs are effective and appropriately targeted to current workforce needs.

examine their program evaluation methods to ensure they are obtaining the data needed to document that their programs are effective and appropriately targeted to current workforce needs. In 2008 Charlotte AHEC established a Program Evaluation Task Force to assess the effectiveness of our program evaluation process, with a focus on documentation of learning outcomes and

program effectiveness. Consistency in program evaluation processes across disciplines was also a priority. This article provides details of our progress and plans for future work in this area.

The Program Evaluation Task Force was established in March 2008, with representation from each AHEC discipline and involving staff at all levels of the program evaluation process, from Project Coordinators to discipline Directors. An initial overview of our program evaluation processes revealed a predominance of Level



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Table 1. Kirkpatrick's Four Levels of Evaluation

Level		What the Level Measures*
1	Reaction	Was the participant satisfied with the educational program?
2	Learning	What did the participant learn from the educational program in the classroom?
3	Application/ Behavior Change	How did the educational program affect the participant's performance in the workplace?
4	Results	Did improvements in the participant's performance attributed to the educational program influence the organizational performance?

**Measuring the effectiveness of educational programs*

^{1,2}Reprinted with permission from Joann Spaleta, MBA, MHA, MT(ASCP) of Charlotte AHEC from *Continuing Education: Moving From Reaction to Learning and Beyond* program materials, based on information from *Evaluating Training Programs: The Four Levels* (3rd ed.) by D. L. Kirkpatrick & J. D. Kirkpatrick (2006).

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I, or participant reaction type program evaluations using a Likert scale for participant satisfaction ratings. There were some inconsistencies between disciplines in how data was summarized and reported, which led to difficulty in comparing program scores between disciplines. A few disciplines, such as Leadership Development, Quality Initiatives, and Continuing Medical Education, had begun to implement more in-depth evaluation processes which assessed learning outcomes. Led by Joann Spaleta, Director of Allied Health, Public Health, Leadership Development and Health Careers for Charlotte AHEC, the task force participated in group training on the Kirkpatrick model of program evaluation, utilizing the four levels of assessment as displayed in Table 1. This established a common terminology and framework for task force members to work with in brainstorming ideas for improvements to our current policies and procedures in this area. Additionally, the majority of task force members attended the summer 2008 North Carolina AHEC Academy of Professional and Organizational Development (A² POD) workshop, "Continuing Education: Moving From Reaction to Learning and Beyond." Developed and taught by Larry Freeman, DMin, LCAS, Associate Director of Northwest AHEC; and Joann Spaleta, MBA, MHA, MT(ASCP) of Charlotte AHEC, this one-day workshop provided an intensive opportunity to study the most up-to-date evaluation techniques and tools to assess CPE performance and outcomes. Supported by this additional training, Charlotte AHEC staff moved forward in updating program evaluation policies and procedures to ensure consistency across disciplines, began implementing increased levels of program evaluation (as appropriate) across disciplines, and improved documentation of program outcomes.

Comparison of course pre- and post-tests have allowed us to document an average of 48% improvement in student knowledge of medical terminology at the end of the six-week program.

Currently, Charlotte AHEC utilizes all four levels of Kirkpatrick's model of program evaluation in assessing program outcomes. All programs begin with a level one (reaction) assessment, measured using a Likert scale. Participant comments on the program setting, speaker, and whether objectives were met are also requested. Basic information on outreach and requested topics for future programs is also obtained. A minimum standard of 4.0 on a 5.0 scale was set to determine program success on this basic level of evaluation. If a program overall

score falls below 4.0, staff will determine recommendations for improvement with documentation in the program file.

Level two evaluation (learning) is currently being implemented in several Charlotte AHEC programs, with a goal of at least 40% of program evaluations being

completed at this level. One example is the "Medical Terminology Made Easy" course. Students take a pre-test the first day of class and a post-test at the final (sixth) session. Comparison of course pre- and post-tests have allowed us to document an average of 48% improvement in student knowledge of medical terminology at the end of the six-week program. Another example is the "Total Parenteral Nutrition (TPN) Update" program. During the last hour of the program, participants are given case studies and asked to develop TPN prescriptions for the case study patients. When finished, instructors review and discuss the answers in class, allowing participants the opportunity to assess their knowledge and catch areas they missed.

Level three evaluation (application) is currently being completed for several Charlotte AHEC conferences and workshops, with the goal of at least 10% of our programs being evaluated in this manner. This level assesses the participant's ability

Charlotte AHEC: Evaluating For Program Quality and Effectiveness

to apply their training in the work setting. Evaluating programs at this level can be very useful in providing program outcome data. Participants are asked to provide information on skill or knowledge application in the workplace approximately 3 to 6 months after instruction. From this data, instructors can determine which elements of the program were learned sufficiently for workplace application; if workplace application has not occurred, the instructors can hone in on why and make necessary improvements to future programs. This is usually achieved using electronic surveys sent to program participants 3 to 6 months after attending a targeted conference or workshop.

Level four evaluation (results) is more time consuming; however, the information obtained can be invaluable in documenting a program's ultimate impact on organization performance. Not all programs are appropriate for this level of evaluation; at Charlotte AHEC our goal is to evaluate 5% of our programs in this manner. To be a candidate for this level of evaluation, the program must be able to produce measurable results in the work setting. One example of this

evaluation level taking place at Charlotte AHEC is our "Quality Improvement 101: A Toolbox for Improvement" course. During this two-part course, participants form teams to plan and implement a quality improvement project in their workplace. Between sessions, three one-hour conference calls and a listserv help to maintain team momentum. In the second session, participants

share project outcomes and develop strategies to maintain and possibly replicate project successes.

Targeted and effective program evaluation is essential for providing AHECs with the data they need to improve program quality and prove program effectiveness.

Recent improvements in Charlotte AHEC's program evaluation processes are already helping to better document positive program outcomes. Due to interest in our region, a further program evaluation course is in development at Charlotte AHEC for our Fall 2009 calendar.

Targeted and effective program evaluation is essential for providing AHECs with the data they need to improve program quality and prove program effectiveness.

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An Urban Health Crisis: The Role of Area Health Education Center of Southern Nevada

Carolyn E. Sabo, RN, EdD, CNE; Marcie Jackson, BS, CHES; and Ranae Shrader, BS

Fifty thousand patients were potentially exposed to bloodborne pathogens, creating a public health crisis. The AHECSN responded to this urban health crisis rapidly and aggressively.



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Ranae Shrader, BS, is the HIV/AIDS Program Manager at Southern Nevada's AHEC.

A public health crisis was exposed with a press conference held by the Southern Nevada Health District on February 27, 2008. Fifty thousand patients were potentially exposed to bloodborne pathogens including Human Immunodeficiency Virus (HIV), Hepatitis B, and Hepatitis C at an endoscopy center in southern Nevada. Patients who visited the center from March 2004 until January 2008 were encouraged to be tested. Unsafe practices, including the reuse of "one dose" medication vials and syringes, were being blamed for the nine new cases of Hepatitis C initially determined to have been transmitted during procedures at the clinic. The Southern Nevada Health District (SNHD) began investigating the endoscopy center in January 2008 after three cases of Hepatitis C were discovered among patients who had undergone endoscopic procedures. It was later determined that at least four other clinics followed similar practices and patients at those clinics were also encouraged to be tested. At least one case of Hepatitis C has been traced to one of the other clinics recently revealed. Information about the health crisis rapidly spread throughout southern Nevada, with potential patients calling the SNHD in such volume that the telephone system was overwhelmed and was temporarily shut down. To date, with most of the patients targeted being tested, no cases of HIV or Hepatitis B have been discovered.

Area Health Education Center of Southern Nevada

The Area Health Education Center of Southern Nevada (AHECSN), an out-

reach arm of the University of Nevada School of Medicine, was established in 1986 and incorporated in 1989. AHECSN has become the state's primary source of healthcare education, support, and information in the underserved urban, rural, and frontier communities in southern Nevada. AHECSN serves Nevada's four southern counties: Clark, Esmeralda, Lincoln, and Nye. This diverse service area includes the most densely populated part of the state (Clark County contains 70% of the state's population) as well as some of the state's most sparsely populated rural and frontier areas. AHECSN also provides statewide programs and training, including the biennial First Lady's Conference on Women's Health Issues, the Sexual Health Conference on teen risk behaviors, Weapons of Mass Destruction training, and training for the Strategic National Stockpile Rollout Plan. AHECSN is also home to the state chapter of Prevent Child Abuse America and serves as a central point of coordination for child abuse prevention efforts and organizations throughout Nevada.

Hepatitis Health Crisis

The Area Health Education Center of Southern Nevada (AHECSN), located in Las Vegas, Nevada, responded to this urban health crisis rapidly and aggressively. A long-standing collaborative relationship exists between AHECSN, the Nevada State Health Division, and the Southern Nevada Health District. The AHECSN AIDS Education and Training Center (AETC) has an acknowledged level of expertise in providing education and training sessions

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on many topics related to the transmission of bloodborne pathogens. Rose M. Yuhos, Executive Director of AHEC-SN, immediately contacted the Nevada Bureau of Community Health Chief, Charlene Hearst; Health and Human Services Director, Mike Wilden; and Nevada State Health Division Administrator, Richard Whitley,

to offer AHECSN and the AETC's support and expertise in meeting the education and training needs of those responding to and those affected by this significant health crisis. In February 2008, the AETC provided Hepatitis A, B, and C training at local correctional facilities, and thus were poised to be able to immediately schedule community-based trainings for other groups. The AETC was asked by the NSHD to begin providing a series of Hepatitis trainings as needed by the community with the first of these trainings held in April 2008. The training was directed to physicians, nurses, pharmacists, and other interested providers, serving approximately 100 health care providers with the latest information on Hepatitis A, B, and C. Two other training programs, reaching approximately 70 providers, were conducted in June and July, 2008. Participant reviews of all the programs were extremely positive. Additional programs are being scheduled to be presented in 2009.

More recently, AHECSN/AETC has been asked by the Nevada State Health Division (NSHD) to collaborate on a public information campaign around bloodborne pathogens. While the fear of transmission of HIV has been predominant among the public, it has become readily evident that information on Hepatitis B and C is also a critical need. Concurrently, the NSHD has requested that AHECSN/AETC provide

Collaborative programming included:

- 1. Professional development for 170 healthcare providers;*
- 2. Development of Web-based CME programs;*
- 3. Public information campaign and press releases of training opportunities;*
- 4. Employee and lay person training.*

additional training sessions on Hepatitis to health professionals. Education and training sessions will be provided to both healthcare professionals and the lay public, with the initial focus being on education and training programs for healthcare professionals. Funding for the development and implementation of these programs has been received from the

NSHD. An initial program of one hour in length has been developed for implementation within working outpatient surgical and treatment centers. The target audience for this program will be registered nurses and center technicians. The focus of this program is hand hygiene, safe injection practices, ethical issues, and transmission of Hepatitis B and C. The curriculum has been created, enduring materials for participants prepared, and presentations at the outpatient centers will begin in early 2009.

An additional online program is currently under development. The program will consist of six separate online units including content, Web links, and a unit exam. Curricular units include hand hygiene, safe injection practices, ethical issues, single-use vials, Hepatitis B and C, HIV, and others. This program is directed at physicians and registered nurses, with application being made to provide continuing education or continuing medical education units to participants who complete the program. The CEUs/CMEs are an added enticement since the program is not required for licensure or renewal of licensure for either provider group.

The NSHD has also recommended that AHECSN develop and provide training courses for their employees on interdepartmental communication and cooperation during public health crises. The NSHD noted that during this urban health crisis,

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with several different bureaus involved in investigations and follow-up, communication among bureaus was complicated. The Health Division has requested that AHECSN provide education and training sessions to employees to improve inter-bureau interaction immediately and in preparation for any future health crises. Development of these programs will begin on completion of the training programs identified previously for employees at the outpatient surgical and treatment centers and online programs for physicians and nurses.

AHECSN further responded by initiating press releases communicating the ability of the Center to provide training sessions to individual professional or lay groups on Hepatitis A, B, and C and HIV. AHECSN has already received many inquiries about this option for training employees or professional groups. As noted previously, Hepatitis training sessions have been provided to healthcare providers and AHECSN is working to schedule additional sessions in 2009. The AIDS Education and Training Center (AETC), housed within AHECSN, continue to provide trainings to lay and professional groups on Hepatitis B and C and HIV/AIDS. These programs have consistently reached 300-400 participants on an annual basis for at least the last six years.

Outcomes

- An urban health crisis emerged in Southern Nevada in February 2008;
- AHECSN offered their assistance in addressing needs identified with the health crisis;
- NSHD provided funding to AHECSN to provide education and training opportunities on Hepatitis B and C and HIV to healthcare professional groups;

- AHECSN provided new Hepatitis A, B, and C programs to professional groups;
- AHECSN developed a one-hour presentation program for registered nurses and technicians at outpatient surgery and treatment centers in southern Nevada;
- AHECSN continues development of a six-module online program for physicians and nurses with implementation estimated for early 2009.

AHECSN and Disaster Preparedness

AHECSN involvement in disaster preparedness is not limited to issues revolving around health crises such as has just been described. The Center includes a department focused on trainings related to weapons of mass destruction (WMD), including content related to identification,

communication, prevention of transmission, and coordination of services among others. These programs have been offered to professionals throughout Nevada for over four years. Many of the challenges faced when responding to an urban health crisis parallels those challenges encountered when responding to an urban crisis associated with WMD.

The vision of AHECSN is "Better Health Through Education."

While AHECSN was assisting the local and state health agencies in a unified response to this

infection outbreak, educational and training deficits were revealed. AHECSN will utilize its expertise, diverse resources, and partner collaborations to prepare our community to respond efficiently and effectively should another urban health crisis emerge.



State of Nevada Counties

Tobacco Sensation: A Health Literacy Project

Andrée Aubrey, MSW, LCSW

As we explored literacy statistics and the smoking cessation resources that were already available, it became clear that there are many smokers with limited literacy, and a scarcity of materials that target this population.

-Stacia Kutter, second-year medical student

At a county health fair in north Florida, a woman and her husband were looking at some AHEC brochures about tobacco cessation classes being offered in the community. "What's this?" the husband asked. The woman took the brochure from her husband's hand, examined it slowly and replied, "It's about tobacco sensation." Looking puzzled, the husband, who appeared to be unable to read, asked his wife, "Tobacco sensation? What does that mean?" She confidently explained, "You know, it's about that feeling you get in your chest when you smoke a cigarette."

All across the state, the Florida AHEC Network in partnership with the Florida Department of Health (DOH) is providing extensive "cessation" services which target rural, medically underserved populations, pregnant women, and individuals with chronic diseases. In meetings with potential organizational partners and community members to discuss AHEC cessation services, it is common to hear responses about tobacco sensation. Exactly what does tobacco sensation mean? With this question in mind, "Tobacco Sensation: A Health Literacy Project" was born.

Andrée Aubrey, LCSW, AHEC Program Director at the Florida State University (FSU) College of Medicine, developed an eight-week service learning project implemented in the summer of 2008. Three medical students and one graduate student in integrated marketing communications were interviewed and selected for the project. Based on her expertise in the area of health literacy, Dr. Gail Bellamy, PhD, Center for Rural Health Research and Policy Director, agreed to join the "tobacco sensation" team along with Ms. Mary Dailey, Certified To-

bacco Treatment Specialist for the AHEC Program.

Despite the proliferation of self-help tobacco cessation materials and Internet sites, systematic reviews of the accessibility of this information in terms of health literacy of the general population of smokers are not readily available to tobacco treatment



(L-R) Bellamy, Kutter, Aubrey

professionals and paraprofessionals. Even the briefest review of Internet sites reveals cessation information being presented at graduate reading levels. Complicated concepts and language such as tolerance, physiological changes, placental abruption, and proportional risk are extensive. One self-help site geared toward pregnant and nursing women discusses the development of extra acetylcholine receptors in the

Literacy is easy to take for granted. Explaining how to quit smoking with minimal words was definitely a creative process.

-Kendall Riley, second-year medical student



Andrée Aubrey, MSW, LCSW, serves as the AHEC Director at the Florida State University College of Medicine.

Tobacco Sensation: A Health Literacy Project



(L-R) Kutter, Volmer, Riley

cortex, striatum, and cerebellum regions of the brain. Although excellent information, it is only helpful to people with reading skills who are able to comprehend medical terminology.

Tobacco use is the **single** greatest cause of preventable disease and premature death in the United States, and adults who smoke lose an average of 14 years of their life. Annually in the U.S., smoking causes over 430,000¹ deaths—more than alcohol, AIDS, car accidents, illegal drugs, fires, murders, and suicides combined. An estimated 45 million American adults currently smoke cigarettes, a prevalence rate of approximately 21%², and half of all smokers will die prematurely.

The tobacco sensation project was developed because the people most likely to smoke are individuals with the lowest levels of education and income,³ and “stop smoking” self-help materials written at the most basic literacy level would be more effective in assisting smokers with lower reading and health literacy skills.

Before beginning work on the project, the students were trained on the U.S. Public Health Service clinical practice guidelines and principles of motivational interviewing. The students reviewed tobacco cessation self-help materials available on the Internet and currently used in community cessation classes, reviewed the literature on health literacy, and identified best practices. After assessing the health literacy levels of selected self-help materials, the students developed a STOP Smoking brochure. But the most rewarding aspect of the project was the students’ experiences with field testing the brochure. In the final weeks of the project, students met with smokers at a homeless

shelter, rural county health department, domestic violence shelter, AHEC cessation classes in a rural community, and a support group for individuals with chronic lung disease. They had the privilege of discussing their work with individuals who openly shared their inability to read.

The STOP Smoking brochure was revised at least nine times in response to community members’ feedback. It is being distributed to the Florida AHEC Network, Florida DOH, and sites affiliated with the AHEC tobacco initiative.

Literacy is an extremely important medical topic that should be addressed at each physician-patient meeting. How is a patient supposed to follow medical directions or take medications appropriately without understanding the words correlating with them?

-Kendall Riley, second-year medical student

The Florida AHEC Network was allocated resources as part of a state constitutional amendment passed in 2006 in which 15% of the tobacco settlement agreement dollars are mandated to fund a comprehensive state tobacco control program. The Florida AHEC Network was charged with the responsibility of: 1) training the current and future health professions workforce to intervene effectively with patients who smoke; and 2) providing smoking cessation services, especially for pregnant women, youth, and individuals with chronic diseases. Based on key champions in the state legislature, the Florida AHEC received \$10 million for each of the initial two years of the state tobacco control program to be distributed among its five AHEC Program Offices at FSU, University of Florida, University of Miami, University of South Florida, and

Tobacco Sensation: A Health Literacy Project

Nova Southeastern University and 10 regional AHECs.

In addition to the brochure, a companion STOP Smoking card based on the principles of motivational interviewing was developed and field tested. Smokers write their reasons for wanting to quit smoking on the pocket-sized card. Smokers are advised to use the card when the craving to smoke occurs to remind themselves about the reasons they decided to quit. The pocket card is used often and is very helpful at the FSU open access “STOP Smoking NOW” class at a local homeless shelter.

This eight-week service learning project con-

Perhaps the most interesting thing that I have learned ... is that while the addiction to tobacco is a universal one, perceptions of tobacco use differ from community to community. Consequently, a widespread anti-tobacco campaign is less likely to be as effective as an anti-tobacco campaign that caters to a specific community.

-Tatiana Fernández, FSU Integrated Marketing Communication Masters Student

tributed significantly to student sensitivity about health literacy and the challenges of developing materials that avoid the use of medical terminology or jargon, polysyllabic words, lengthy sentences without the use of illustrations, and have low legibility (poor font size and spacing). In addition, the project ended with students having a quality product they developed and fine-tuned with input solicited from smokers across the northern panhandle of Florida and from all walks of life. This product will touch the lives of many Floridians who smoke or have friends and family who smoke.

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**AHEC — Connecting students to careers,
professionals to communities, and
communities to better health.**

What is social networking?

Once upon a time the World Wide Web was created. We could access information from anywhere if it is posted it on the web. Then came e-mail communication to one person, followed by texting. To get info out to a group of people, listservs were developed. Then blogs and discussion boards were created for a group of people from distant places to voice their opinions in an ongoing manner, like a long distance meeting taking place over time. Now you can share documents with multiple people online at the same time, can schedule meetings, can have video conferences, and more.

Are you still wondering what social networking is? Just ask your kids!

When they aren't speed typing with their thumbs and creating an entirely new texting vocabulary, they are probably online 'chatting' with their friends. So, what's all the rage and what does it have to do with AHEC? Social networking is an umbrella term that covers all kinds of online communication. It is basically getting people communicating online. It is identifying people with similar interests and creating an online place for the group to communicate.

To put it simply, if we want to attract the up and coming generations, we have to talk in their language, and engage them by using their forum.

National AHEC Organization hopes to use social networking for three interconnected purposes:

1. Improve ease of internal communication through discussion boards for committees and groups that include document-sharing capability.
2. Increase external sharing, primarily sharing of information with and between AHEC participants. This will increase visibility of AHEC and also increase the reach of AHEC programs.
3. Long-term tracking of participants through regular communication with students on social networks. In an ideal format, the networking experience would extend through the student's transition into health professions training and out into practice, linking the individual to AHEC services throughout that continuum.



COMMUNICATION
RELATIONSHIP
COMMUNITY

Term	Definition
Blog	A blog is a Web site created by an individual on a specific topic. The site is updated regularly and typically consists of text. Most blogs are used as an online diary of sorts where people log on to write about their life or a topic they are passionate about.
Discussion Board	A discussion board can host a variety of ongoing topics in forum folders. An example of a discussion board can be found at www.tulsanow.net/forum
Forums	Forums are used as sites to share information, have discussions, or share documents. There are forums for just about everything. People go to these sites to ask questions, share their viewpoints, or read what others feel or know about a subject.
Instant Messaging	Instant Messaging (IM) is basically the same as sending a text, except it is typically done with a computer. It also has the capability to send links and images as well. It is usually used for chatting, similar to a phone conversation.
Listservs	Listservs are used to e-mail a large number of people at one time. Similar to creating a distribution list in Outlook, but with listservs people have to subscribe and unsubscribe from the group.
MySpace and Facebook - examples of social networking Web sites	Allows you to link yourself to other individuals or organizations, both professional and social, that use these Web sites to reach audiences. Other examples include Reunion, LinkedIn, and Ning.
Text Messaging	Text messaging is typically done with a cell phone and is a faster way of communicating with people than calling them. You can also send mass text messages to multiple people.
Twitter	Very similar to Instant Messaging, but texts are limited to 140 characters and generally describe what the person is currently doing.
Wiki	Wikis are Web sites that allow users to create the content. There is usually a "moderator" of sorts that allows or denies changes to the webpage so that incorrect information is not uploaded.

NAO Networking

Please go to www.nationalahec.ning.com to try out our new social network, let others know about your own social networking activities, and to learn more about utilizing these tools in your work.

User Name

Password

Log In



Some highlights of AHEC-developed social networking tools

Youth Health Service Corps
<http://yhsc.org>
 (social network for targeted audience)

Sample AHEC uses of mainstream social networking sites:

www.facebook.com

- Double T Health Service Corps
- Minnesota AHEC
- North Louisiana AHEC
- Northwest AHEC
- South Carolina AHEC
- Southern Vermont AHEC
- AHECSW Oregon

www.MySpace.com

- AHEC Rocks!
- Camden AHEC
- Medstars
- SE OK AHEC
- Tobacco Awareness Program
- Upstate AHEC

Podcasts

www.radioAHEC.org

Wiki

<http://cascehelp.sr-ahec.org/>

AHEC Has “The Keys” to Help Patients Quit Smoking

Michael Cunningham

The Florida Keys, an archipelago of about 1,700 small islands, is a popular tourist destination. One of the most famous residents of the Florida Keys was Ernest Hemingway, and many local residents replicate the hard-drinking, cigarette-smoking lifestyle that he lived. According to the Florida Department of Health, smoking and alcohol consumption are two of the biggest health problems of the Keys, which has a population of just under 80,000 residents.

Florida state health officials estimate that at least 30% of the people living in the Keys smoke, compared to 23% for the rest of the state and 20% for the rest of the country.

“The Florida Keys,” says Florida Keys (FKAHEC) CEO Michael Cunningham, “has a deserved reputation of being a hotbed of alcoholism and smoking. But at the same time, we have found a lot of people who want to quit that kind of lifestyle and make positive healthy changes.”

FKAHEC is no stranger to helping people improve their health and responded to the latest challenge by developing the county’s first smoking cessation program, which was born out of court-ordered tobacco settlement monies in the late 1990s, as noted in the previous article. The State Legislature funded the Florida AHECs’ smoking cessation programs through the 2009 fiscal year.

But how does a relatively small AHEC

Six Certified Tobacco Treatment Specialists used the “Quit Smoking Now Program” to:

- 1. Provide in-service training to health professionals including online CME*
- 2. Medical and nursing students doing in-school training for middle and high school students.*
- 3. Outreach to large employers throughout the county.*
- 4. Community-based training at wellness centers, churches, and community centers.*

go from having no smoking cessation programs, to creating comprehensive, effective county-wide services in nine months?

The program began by training two professionals to become Certified Tobacco Treatment Specialists through the program offered at the University of Medicine and Dentistry in New Jersey. Later, four more staff became certified. They immediately began working on several

fronts, creating training manuals and participant workbooks, brochures, and print materials to advertise the “Quit Smoking Now Program” in addition to developing a referral base.

The center was charged with taking our tobacco cessation program into the community for patients as well as healthcare providers and health professions students. The priority was to enlist the support and participation of the county’s three hospitals, physicians, and social service agencies. FKAHEC partnered with them both contractually and with memoranda of agreement.

A big challenge was the geography of the Keys. Monroe County is 130 miles long, and in places, only a few hundred feet wide with 42 bridges connecting the islands. Key West is located at the farthest point in the Keys, and it is home to half its population. Key Largo and Marathon are the two other towns with sizable populations, but



Michael Cunningham is the Executive Director of the Florida Keys AHEC.

AHEC Has “The Keys” to Help Patients Quit Smoking

all of the Keys is considered a rural, under-served area. So, FKAHEC used some of the funding to establish two additional offices, one for the Upper Keys and the other in Key West, where participants could receive individual evaluations and treatment plans and support groups could be held.

In-service trainings were conducted throughout the Keys in physician offices to further educate healthcare providers about new Public Health Service guidelines for tobacco cessation, nicotine replacement therapies, and the services being offered at no cost to their patients. Optometrist Harry Landsaw, OD, commented after the training conducted in his office, “I have always advised my patients of the health risks of tobacco use, and urged them to quit smoking, but I never had anywhere to refer them until now.” In-service training has been provided to nearly all physicians in the Keys. FKAHEC was also able to “piggyback” smoking cessation to its existing CME programs, providing additional exposure. There are currently 10 online CME tobacco courses. To date, 30 healthcare providers have completed these courses. This year six medical students presented “They’re Rich, You’re Dead,” a program about tobacco companies and patients suffering from tobacco-related illnesses, to sixth graders throughout the Florida Keys. Five nursing students presented the AHEC Tobacco Training and Cessation (ATTAC) program to ninth graders. A Web site, keystoquitsmoking.com, was also launched.

To increase outreach, the program was offered to large employers throughout the county. It is well established that having fewer smoking employees leads to increased productivity, reduced absenteeism, and a healthier workforce. There are currently

five employers offering the “Quit Smoking Program” on site, with new groups starting periodically.

Smoking cessation programs were also taken to community sites such as wellness centers, churches, and community centers. Additionally, FKAHEC partnered with governmental and non-governmental agencies and schools to provide cessation and training services.

Out of 1,500 people enrolled in the cessation program, 70% have completed the program and approximately 34% of those have remained tobacco free.

The “Quit Smoking Now Program” is an evidence-based six-week group and individual support program. All participants are given an individual assessment prior to beginning sessions. All sessions are free. Participants who qualify financially are

also offered nicotine replacement products or medication assistance. All participants are offered the services of the American Cancer Society’s Florida Quitline, which provides phone counseling and nicotine replacement products when available.

Participants are currently followed up at one month and three months. Cessation statistics to date indicate that approximately 40% are smoke-free.

Starting with no participants and now at over 1,500 people served by the program, FKAHEC is taking stock of its first year. There have been many victories—specifically the 34% participants who are currently smoke-free. Challenges for the future include relapse prevention, continuing to increase awareness, and referrals to the program from healthcare providers and the biggest challenge of all—systems change—the creation of a fully proactive environment for tobacco cessation.

Social Networking and the Youth Health Service Corps (YHSC) Program

Tricia Harrity, MS

The Youth Health Service Corps (YHSC) program began in 2004 as the brainchild of Dr. Bruce Gould, Director of the CT AHEC Program. The intent was to inspire disadvantaged youth to fulfill their dream of becoming a healthcare professional through meaningful community service. The 50 high school students who participated in the Connecticut AHEC's YHSC pilot program did not realize they were launching an exciting national program that mobilizes youth as change agents addressing pressing community healthcare issues. The YHSC program has grown to include 30 AHECs participating from 18 states across the nation. More than 1,100 high school students have completed 12,000 hours of community service in healthcare agencies serving vulnerable populations. While the YHSC employs many innovations, the most exciting is the use of the Internet to keep students connected and to perform program evaluation.

YHSC Social Network

Social networking is basically meeting and maintaining communications over the Internet. This can be done by e-mail, texting, blogging, Googling, and many other ways. The most popular social networking sites are Facebook and MySpace. Both of these allow individuals to create their own page with their information and invite friends into discussions. The Youth Health Service Corps launched its social network in November 2008. The social feed of the member's section of www.YHSC.org functions much like the popular social networking Web sites Facebook and MySpace. Students personalize their space with music, backgrounds, pictures, video clips, etc. Students make friends with other YHSC members from across their neighborhood, their state, or the country to form a social network of YHSC volunteers who are interested in pursuing a career in health care.

The overarching goal of the YHSC program is to recruit under-represented

students into health professions with the desire to serve underserved populations. The YHSC's founder, Dr. Bruce Gould, believes that a student's desire to make a difference in people's lives must be nurtured throughout their formative years. Engaging high school students in service learning projects that address pressing community healthcare issues such as childhood obesity



Northwestern AHEC YHSC students participate in an Oral Hygiene service learning project.

and oral hygiene are excellent ways to nurture the desire to serve into adulthood. The social networking features of www.YHSC.org enrich the student's YHSC volunteer experience by connecting them to the "big picture." Students experience tremendous growth through interaction with other students who are also out there "making a difference" in their communities.

The YHSC's social network is in its infancy. As the YHSC social network grows, it will include not only YHSC members, but also health profession students and health professionals. The vision is to build a community that will give YHSC members a myriad of resources as they explore health careers, matriculate into health professions training programs, and ultimately practice in the community. For example, Northwestern CT AHEC has begun a mentorship program with dental hygiene students at a local community college. Dental hygiene students and YHSC students will work together to develop an oral hygiene service learning project that includes community assessment, program development,



Tricia Harrity, MS, is Executive Director of the Northwestern CT AHEC.

Social Networking and the Youth Health Service Corps (YHSC) Program

implementation and evaluation, reflection, and celebration. The dental hygiene students will meet “face-to-face” with YHSC students approximately once per month. Other social interaction will take place on the YHSC Web site in a dental hygiene forum. YHSC students and AHEC coordinators from across the country will also be able to join this network to get involved with the oral hygiene project. Involvement can take many forms, including learning about the project, joining discussions, and giving feedback and support or getting support to replicate the project in their community.

Social Networking for Evaluation: YHSC Helix Database

All AHECs implementing the YHSC program are using the YHSC Helix database to track student participation in the program. The YHSC Helix database keeps track of student training, volunteer hours, pre- and post-participation surveys, as well as information about college matriculation and future employment. To improve the quality and quantity of data collection, the YHSC program is building an on-line communication pattern with members while they



Western Maryland AHEC YHSC students use the Wii system to engage residents at a local nursing facility.

participate in the program. This online communication will be used to stay in touch with students as they leave high school and cease their direct participation in YHSC. Hopefully online communication will improve AHEC’s ability

to track students as they leave our health careers recruitment programs.

As the number of AHECs utilizing the YHSC Helix database grows, so does the power of the data collected. Over time this data set will paint a picture of a national pipeline of students extending from high school through post-secondary health profession training programs into the health care workforce.

2007-2008 Evaluation Results

Post-assessment survey responses of 2007-2008 YHSC participants revealed:

- 76% of students reported they “strongly agreed” or “agreed” that as a result of participation in the YHSC they are **doing better in school**.
- 94% of students reported they “strongly agreed” or “agreed” they know what skills are needed for their careers.
- 99% of students reported they “strongly agreed” or “agreed” they can make a difference in their community by getting involved.
- 76% of students reported they “strongly agreed” or “agreed” that within the past month they increased their time reading and/or watching news stories about health/safety issues in their community.
- 94% of students reported they “strongly agreed” or “agreed” the YHSC made them feel more confident about themselves.

Summary

The creation of the YHSC database and social network will take a long-term investment of time and money and a tremendous amount of perseverance. There are many challenges that must be met. Many YHSC members lack adequate and/or convenient Internet access. And even though the YHSC students were born in the “digital age,” many of them have low computer literacy. Additionally, both the YHSC coordinators and YHSC members need ongoing training and support as they use the Web site. It is imperative that AHEC persevere through these challenges to help disadvantaged students close the digital divide. In the end, harnessing new technology to further AHEC’s mission is an innovation that will pay huge dividends.



Abraham Martinez, a freshman from Alexander High School, learns CPR as part of the Mid Rio Grande AHEC’s YHSC program.

Podcast Web Site Targets Internet-Savvy Medical Students

Sherry Stafford, MEd; and Karen Mantzouris, BA

Fewer medical students choosing family medicine means increased competition among residencies for applicants. To enhance visibility of the Duke/Southern Regional AHEC Family Medicine Residency Program in Fayetteville, North Carolina, the directors of educational technology and marketing partnered to create a podcasting Web site as a recruitment tool. The result was www.RadioAHEC.org, the first known podcasting site for resident recruitment.



Sherry Stafford, MEd, is the Director of Educational Technology at North Carolina's Southern Regional AHEC. There she identifies and deploys innovative technologies and is a leader in social networking. She has a BA in psychology and an MEd in Curriculum and Instruction.



This innovation by Southern Regional AHEC was motivated by evidence that traditional marketing methods are less effective in a market where online job-search strategies are now widely used. In addition, traveling to recruitment conferences is expensive for both recruiters and medical students. Online recruitment appears to be a logical alternative to travel. By staging an Internet presence, Southern Regional AHEC significantly extended its recruitment territory and is meeting medical students where they are increasingly likely to shop for residencies—on their laptops!

Although the creation of RadioAHEC was based on marketing instinct, current statistics support the use of podcasting as a recruitment tool. An annual study by Arbitron/Edison Media Research Internet and Multimedia concluded in its 2008 report that: "Podcasting is a viable alternative means to target attractive consumers who are otherwise proving difficult to reach with traditional advertising."¹ The study characterizes podcast users as being college-educated, associated with household incomes

above \$75,000, and having an active online life. It seems likely that medical students are members of this tech-savvy generation that typically listens to iPods, watches videos online, and can easily navigate the Internet. The Pew Internet and American Life Project details their survey data that indicate accelerated adult use of podcasts and social networking Web sites in the last two years.²

RadioAHEC attempts to engage their target audience and begin to build social relationships with medical students even before they arrive at the AHEC for an interview. Podcasts offer candid commentaries by preceptors, residents, and other professionals on the life and work of residents. The creators recently added an interactive video tour of their residency, which one applicant indicated as the reason he applied to the residency. RadioAHEC combines entertainment and information, attempting to attract medical students and convey the spirit of the program, not just cold hard facts. It is a cheerful yet uncomplicated Web site. The focus is on sharing relevant stories—"real world information about resident life."

Building RadioAHEC

The idea for RadioAHEC was born in 2006. Podcast Solutions by Geoghegan and Klass was used as a research source, and an open source software (Joomla!) and a podcast plug-in module were used to construct the Web site in-house. "We've probably invested about \$350 in RadioAHEC since its inception," reports Mantzouris, director of marketing at SR-AHEC. Although books helped with the technical challenges, the creators credit blogs for their inspiration and solutions to problems.

Promoting RadioAHEC

RadioAHEC debuted at the 2007 North Carolina Medical Residency Fair, which was sponsored by the NC Academy of



Karen Mantzouris, BA, has served as Director of Marketing and Public Relations at Southern Regional AHEC in Fayetteville, NC for more than nine years.

Podcast Web Site Targets Internet-Savvy Medical Students

Family Physicians and the NC AHEC Program. There the authors spoke with medical students and promoted participation in an iPod giveaway. Contestants were required to use RadioAHEC's "Contact Us" feature to register for the free iPod, send their contact information, and suggest podcast topics. Podcast interviews with the winners were posted on RadioAHEC. The podcasts that currently populate RadioAHEC feature the contestants' suggestions.

Several other AHECs in North Carolina have begun to integrate podcasting into their own Web sites, while RadioAHEC itself has expanded to accommodate SR-AHEC's pharmacy residency program. Podcasts for nurses will be featured on RadioAHEC in 2009.

RadioAHEC Success and Recognition

Measuring success statistically, RadioAHEC.org has received over 38,000 hits since posting its first podcast in March 2007. The podcasts themselves have received over 3,000 plays. In November 2008, the Carolinas Healthcare Public Relations and Marketing Society (CHPRMS) honored Sherry Stafford and Karen Mantzouris with a Golden Tusk Award (in the recruitment category) for their creation of RadioAHEC.org. "We felt from the beginning that the site is a unique and effective recruitment tool and we appreciate the recognition from our peers," says Mantzouris. "While it's too early to credit RadioAHEC as a deciding factor for medical students choosing us for their residency, it helps them get to know us and certainly has reached thousands more potential residents."

Podcast Consumption Is Easy

Podcasting has a superbly unique feature: It allows user-controlled subscription. After a user subscribes, new "episodes" of a pod-

cast are automatically delivered whenever the subscriber connects to the Internet. This feature is based on an old technology called RSS (Really Simple Syndication) that delivers news updates in text format to "newsgroups." An additional convenience is that, unlike e-mail subscriptions that require a user to sacrifice privacy by divulging an e-address, a podcast subscription record (the podcast site URL) resides on the user's device. The user can simply remove the URL to end the subscription.

Can Your Program Use Podcasting?

Southern Regional AHEC remains committed to the use of podcasting as a form of social networking to attract medical students across the country to their residency. Podcast technology is also giving them an opportunity to go where health care has not gone before in the delivery of education and information to a unique group of users. Inventive applications of podcasts continue to emerge, appearing to be limited only by the boundaries of creative thought.

If you are considering the use of podcasts in your programs, you can find a quick summary of production requirements and some creative suggestions at RadioAHEC.org. On the homepage, click the "Creating Podcasts" button. Click "How to Use Podcasts" for a helpful summary of ways to listen to podcasts.

Wondering About Residency?

Real World perspective from those who live it!

RadioAHEC
Medicine for your ears! © 2008
Podcasts About Resident Life

www.RadioAHEC.org

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²Madden, Mary and Jones, Sydney [2008]. Reports: Technology and Media Use, Podcast Downloading in 2008. Retrieved January 29, 2009 from www.pewinternet.org/PPF/r/261/report_display.asp.

Using Data to Drive the AHEC: The Mississippi Center for Health Workforce

Jeralynn S. Cossman, PhD; Stephanie Young, MPH; Stephen L. Silberman, DMD, MPH, DrPH; and Katherine C. Harney, BA

Without knowing the actual healthcare workforce needs of a target region, it is impossible to develop the needed pipeline programs or track program success. The Mississippi AHEC has focused on enhancing the availability of relevant and accurate information on health workforce needs.

Most of us perform activities with the purpose of recruiting students to health careers. However, without knowing the actual healthcare workforce needs of a target region, it is impossible to develop the needed pipeline programs or track program success. Therefore, in recent years, the Mississippi AHEC has focused on enhancing the availability of relevant and accurate information on the health workforce needs of Mississippi.



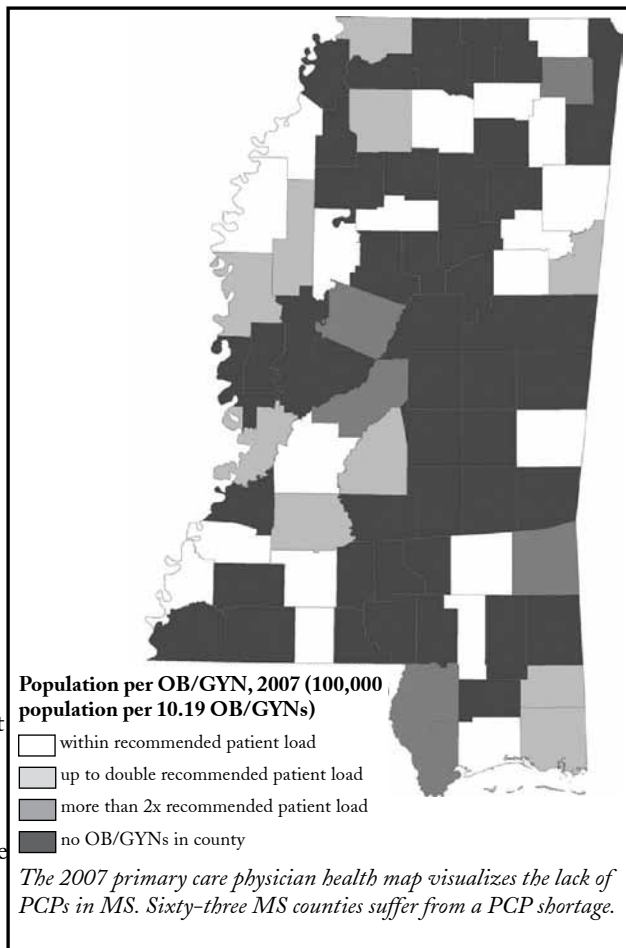
Jeralynn S. Cossman, PhD, is Associate Professor of Sociology; Research Fellow, SSRC; Principal Investigator, NE MS AHEC; and Director, Mississippi Center for Health Workforce.

In 2007, the Mississippi AHEC Program Office partnered with Mississippi State University and the Mississippi Department of Health to bring together physicians, dentists, professional associations, and other stakeholders to discuss possibilities of institutionalizing funding for an annual evaluation of physicians and other healthcare professionals. Extensive meetings during 2007 pointed out data deficits and the possible benefits of collecting, analyzing, and reporting workforce data. This information led to the establishment of the Mississippi Center for Health Workforce (MCHW), an entity created within the Northeast Mississippi AHEC, as a statewide healthcare workforce data clearinghouse. This center performs an annual assessment of the healthcare workforce, using data from annual licensure renewal forms and supplemented with periodic surveys,



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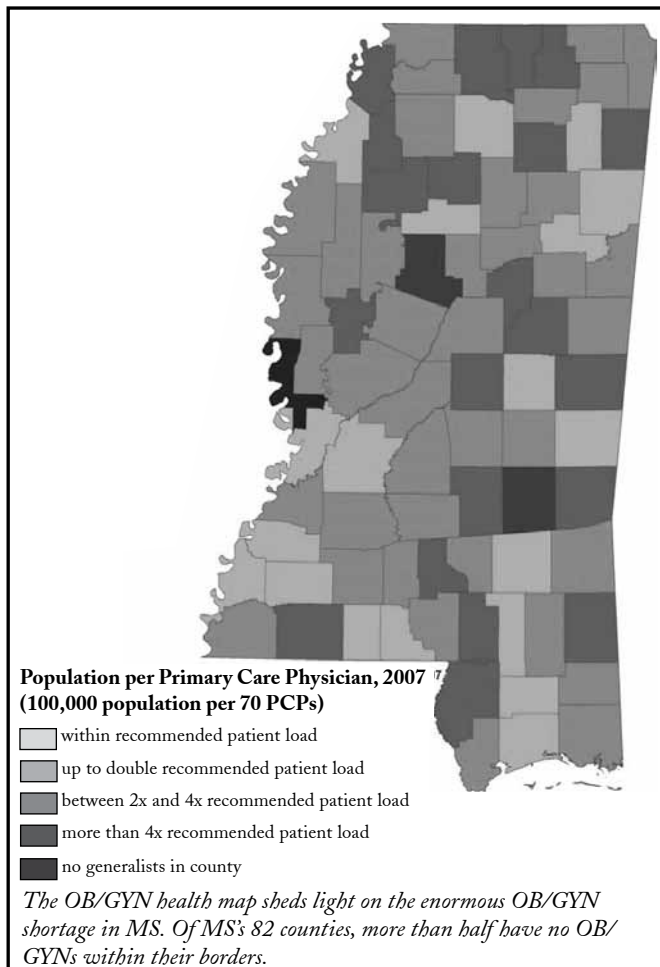
disseminating the data to health professionals and policymakers across the state. The licensure renewal forms in Mississippi contain many questions concerning specialties in which physicians practice, locations in which they practice, nurse practitioners they supervise—all of which can be used



Using Data to Drive the AHEC: The Mississippi Center for Health Workforce

to help us better understand access to care.

In October of 2003, Jeralynn Cossman, the Northeast Mississippi AHEC's Mississippi Center for Health Workforce Director, published *Mississippi's Physician Labor Force: Current Status and Future Concerns* (available at www.healthpolicy.msstate.edu/publications).¹ This report was the first formal analysis concerning Mississippi's physician workforce in more than a decade. At the time, the state was experiencing a malpractice crisis² and physicians were not being recruited or retained at necessary levels. Most of the counties in the state were health professional shortage areas (HPSAs) and many Mississippians were finding it challenging to access care, particularly for high-risk pregnancies and neurosurgery. The findings from this report indicated that young physicians, minority physicians, and women physicians were all underrepresented in the state, highlighting a need for recruitment programs that focus on young, women, and minority physicians. The study also indicated that nearly half of the state's physicians were trained in state, highlighting a need to increase the medical school's class size. The research also found that nearly three-quarters of young physicians were considering relocating and roughly the same proportion of older physicians wanted to retire early. These reported findings did result in some policy changes. For example, the medical school class has been increased by five students per year for the last three years and will increase by another 10 students in the coming two years. Efforts by the medical school have resulted in increases in the proportion of female medical students as well, with



one class in 2004³ having more women than men. Finally, the results from this survey have been used by professional associations to lobby for the development and funding of a Rural Health Scholars program, designed to encourage medical students to practice in rural areas.⁴

Cossman has also developed a relationship with the Mississippi State Board of Medical Licensure (MSBML), which provides

Findings:

1. Underrepresentation of young, female, and minority physicians
2. 50% of physicians were trained in state
3. 3/4 of physicians were considering relocating or retiring



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Using Data to Drive the AHEC: The Mississippi Center for Health Workforce

license renewal data each year. Cossman and her colleagues analyze this data annually to assess shortages and potential future access issues. Publications from these data were previously posted at the Mississippi Health Policy Research Center Web

site (www.healthpolicy.msstate.edu/publications), but current and future publications are posted at the Northeast Mississippi AHEC Web site (www.nemsahec.msstate.edu/pubs.html). The relationship with the MSBML has developed to the extent that the licensure board has agreed to add a question on the renewal form: hours worked per week at each practice location. This data will be used to further refine analyses of shortages, as we will be able to assign a physician to a county based on their FTE in that practice location (i.e., if they work half-time at two different locations, we can now note that and adjust accordingly). Other publications from this data include an assessment of the importance of nurse practitioners to the primary care workforce in the state and another showing that nearly half of Mississippi's counties are without

Impact includes:

1. Identifying areas of physician need
2. Identifying root causes of burnout
3. Influencing policy
4. Tailoring pipeline programming
5. Improving recruitment and satisfaction
6. Coordinate AHEC evaluation efforts

an obstetrician-gynecologist.^{5 6 7}

So, how can these types of reports help AHECs with their mission to fill the healthcare workforce pipeline? First, the licensure analyses obviously indicate geographic

areas of need. Second, studies are currently underway to understand the root causes of burnout so that we can better retain physicians who are considering retiring early.⁸ Third, providing evidence to policymakers makes a difference in their priorities. Fourth, pipeline program development must be driven by the state's needs as well as the students available to participate in pipeline programs—both of which need to be quantified for program improvement. Fifth, our most recent survey results focused on physician satisfaction; we intend to use those results to develop recruitment materials (i.e., show doctors we are recruiting, what doctors who practice here like most about it). Finally, research centers like the Mississippi Center for Health Workforce can coordinate the evaluation efforts of AHECs across a state, concentrating evaluation in the hands of people trained to do so.

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Enhancing Local Health Services

Arthur M. Fournier, MD; and Carole R. Todini

When AHEC funding commenced in 1987, almost all medical education at the University of Miami Miller School of Medicine (UM) took place within the medical center campus that included the school, the county municipal hospital, Jackson Memorial Hospital, and the Miami Veteran's Administration Medical Center. Although surrounded by medically underserved communities, the medical center had few connections with those communities other than training centered on emergency care of indigent patients. AHEC provided a means to move health professions education out of the medical center and into the community as well as a means for direct provision of service through community-based health professions clinical training. As a result, both the medical school and Miami's underserved communities have benefited. AHEC became a change agent for both the school and the communities it served.

In addition to traditional recruitment and retention services to community providers, the UM AHEC program office and its affiliated Centers, the Miami-Dade AHEC and the Florida Keys AHEC, worked in close partnership to address the needs of South Florida's medically underserved communities. Together they pioneered a service-learning method of training using medical student/faculty teams that brought healthcare services to marginalized patients who fell through the gaps of the healthcare safety net. This was accomplished through the establishment of model teaching clinics that serve the homeless, immigrants and refugees, migrant farm workers, inner-city historically black communities, and school-based clinics. UM AHEC invests in the start-up of the clinics, providing funds for community-based faculty and offering health professions schools these clinic sites for training of their students. In most cases, these clinics are sustained by public

or foundation funding in the long run, yet retain their affiliations with health professions schools as clinical training sites. With the infrastructure for primary care education created by the UM AHEC Program, UM was able to shift training of its medical students from a hospital-based model to one with strong relationships with several medically underserved communities and carved out a special role for AHEC as a provider in the healthcare safety net in the two-county region.

Today, the Florida Keys have a high percentage of working poor and geographically isolated patients while Miami is a city where 50% of its residents speak some language other than English as their primary language and around 29% of the population (estimated 600,000 people) are uninsured (Florida Health Insurance Study of 2004, Medicaid Program). Additionally, this population is culturally and ethnically diverse, with large numbers of recent immigrants from Central and South America, and the Caribbean, particularly Haiti. The student/faculty clinical training teams sponsored through UM AHEC now deliver over 50,000 primary healthcare services yearly in the model teaching clinics developed with the assistance of UM AHEC.

The Open Door Health Center in the Homestead/Florida City area of South Miami-Dade County typifies how UM



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Two nutrition students conducting a health education class at Open Door Health Center.



Carole R. Todini is the Associate Program Director for the University of Miami AHEC.

Enhancing Local Health Services



Dr. Nilda Soto, Medical Director of Open Door Health Center, with two Nurse practitioner students talking with a patient at the Center.

AHEC has assisted in the development of these grassroots clinics. The Open Door Health Center was created in early 2001 to address the need for primary healthcare services for Hispanic and Haitian migrant camp workers and their families who work the large vegetable farms in the area. The Miami-Dade AHEC Center played a major role in the development of this Center by bringing together several community partners to contribute to the operation of the clinic. These partners included Baptist Health of South Florida and their extensive network of volunteer physicians, Open House Ministries, the Health Foundation of South Florida, Barry University School of Podiatry, the Robert Wood Johnson Foundation, and the University of Miami Schools of Nursing and Medicine.

The partners contribute in the following ways: Baptist Health Systems donates a significant amount of in-kind lab tests, diagnostic services, surgical services, and prescription drugs, as well as the services of volunteer physicians from various specialties; Open House Ministries furnishes space for the clinic in their facilities; the private health foundations provide yearly grants; and the health professions schools supply faculty/student teams who deliver healthcare services. UM AHEC recruited and continues to provide financial support for a physician for the clinic, Dr. Nilda Soto. Dr. Soto, a Hispanic physician dedicated to the patients she serves, was also awarded a clinical faculty appoint-

ment at the University of Miami Miller School of Medicine. In addition, AHEC provides a variety of technical assistance and other services to the Center. Examples of these services include: medical services, nutritional counseling, and education by faculty/student teams to patients and the surrounding community. AHEC-trained Community Health Workers assist patients with understanding the health care system and linking them with community resources, multi-lingual patient education materials, and health education classes that address the healthcare needs of the community.

All involved in the development and operation of these community clinics in the region have benefited. Because of the existence of these clinics, medically needy patients now receive quality, culturally, and linguistically appropriate health care, and, because their illnesses are being controlled, they are able to avoid utilizing the emergency room for chronic illnesses. Medical, nursing, nutrition, and other health professions students can develop their general practice skills and expand their cultural diversity experiences. These students have the opportunity to work as members of an interdisciplinary team; learn to practice with limited resources, and learn how to have an impact on chronic illnesses through patient education.

Over and above the clinical knowledge they learn at these sites, students also gain a profound understanding of the diversity of South Florida and the challenges and rewards of serving those in need. Medical education has always had a relationship with indigent communities. However, there is always a risk that vulnerable populations could be exploited by that relationship. The University of Miami AHEC Program working cooperatively with medically needy communities in the area has transformed that relationship into one in which students and faculty learn *from, by, with,* and *for* the communities they serve. It's a win-win situation for all.

Fostering Innovation in Primary Care Practice: The Patient-Centered Medical Home

Mark B. Mengel, MD, MPH; William J. McIntyre, PharmD; and Ron L. Cole, MBA

The Patient-Centered Medical Home (PCMH) is a new model of primary care advocated by the American Academy of Family Physicians, American Academy of Pediatrics, and the American College of Physicians in order to strengthen services that primary care physicians can offer their patients.¹

Joint Principles of the Patient-Centered Medical Home

- Personal physician
- Physician-directed medical practice
- Whole person orientation
- Coordinated and/or integrated care
- Improved quality and safety
- Enhanced access
- Appropriate payment

In 2006, the American Academy of Family Physicians sponsored a 24-month demonstration project on the Patient-Centered Medical Home, called TransforMed. The authors determined that establishing a Patient-Centered Medical Home was not just a matter of using existing information technology to improve the quality and accessibility of primary care, but involved a great amount of change to practice workflows and staff roles in order to institute new processes and procedures that improved access to care, quality of care, and safety.² Additionally, the Patient-Centered Medical Home requires additional resources to support the team-based care that is mandated under the model, particularly for care of patients with chronic illness, and the additional IT resources that are required, to track key outcomes of care, preventive interventions, and provide Web-

based communications between patients and providers. A recent report concluded that primary care providers would need to be reimbursed \$100,000 more per year in order to have the resources necessary to implement the full model.³

Six of eight of Arkansas' Area Health Education Centers (AHEC) include Family Medicine Residency Programs (FMRP) with an outpatient clinical component located in Family Medicine Centers (FMC), providing care to patients who are underserved in rural Arkansas. In fiscal year 2008, Family Medicine Residency Program faculty and residents provided 161,962 outpatient visits and delivered 2,329 babies. 41% of patients are Medicaid. Additionally, we provided \$2.4 million in uncompensated care during the fiscal year. Because of the need for patients to have a medical home (many have severe chronic illnesses and many need preventive services), we decided to start the process of implementing this model of care in our Family Medicine Centers. As there are many uncertainties and barriers to implementation of the full model, and lack of an available reimbursement model for these new services currently, we have chosen to prioritize implementation of Patient-Centered Medical Home components as resources allow.

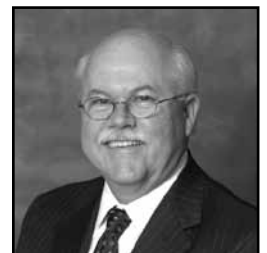
The Arkansas AHEC Program took the first steps toward a Patient-Centered Medical Home model by mandating that all Family Medicine Centers implement the Centricity electronic medical records (EMR) system by the end of 2009. Resources utilized for this EMR implementation included enhanced Medicaid reimbursement, UAMS' IT department, our



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Fostering Innovation in Primary Care Practice: The Patient-Centered Medical Home

own IT personnel, and champions at each one of the AHEC centers. Implementing an EMR typically took three to six months of planning and preparation, particularly in the formation of new clinical workflows, with an additional six months' implementation time required before returning to full clinical productivity once again. In true cost, this implementation amounted to a multi-million-dollar effort.

Once this implementation was well underway, those AHEC centers with FMRP felt comfortable piloting certain aspects of the Patient-Centered Medical Home. In order to foster this innovation, the Central Office organized a one-day retreat in May of 2008, which enabled teams from each AHEC center to explore the model and construct a pilot project. Each one of the six AHEC centers with a Family Medicine Residency Program was able to construct a pilot project that would last one year and would include an evaluation component. Funding was provided to those centers that required it through an innovation fund. Interested centers could apply to the innovation fund committee for up to \$25,000 in pilot money.

The pilot projects of two of the centers are illustrative of this effort. The AHEC in Southwest Arkansas decided to pilot a team-based model of diabetes care in which nurses were provided evidence-based protocols and could obtain tests and do procedures on patients with diabetes mellitus without the prior approval of the physician. AHEC – Southwest felt that this would increase the number of diabetic patients who received these evidence-based measures and improve outcomes of care. The AHEC in Northeast Arkansas constructed a pilot project to investigate the feasibility

of a direct nurse triage line to improve access to care and decrease response time. Patients could call this line directly and get their medical needs addressed immediately in most cases, rather than being referred to the patient's provider, which took too long, according to our patients.

As the Patient-Centered Medical Home (PCMH) offers a framework to transform primary care into a more robust system of care, hoped-for outcomes of this transformation include improved access to care, for example, reduced wait times for an appointment; improved chronic illness outcomes, such as reduced hemoglobin A1C values in patients with diabetes mellitus; more patients receiving needed evidence-based preventive interventions, such as colorectal cancer screening in adults over 50; improved and more responsive communication with patients, particularly through e-mail and the Web; better patient self-management skills; less health disparities; and reduced cost, principally from savings from decreased emergency room and hospitalization usage. While specific outcomes of our pilot projects will not be available until June of 2009, the Arkansas AHEC was able to facilitate the process of clinicians beginning to explore the Patient-Centered Medical Home model by implementing EMR at each of our FMCs, organizing a retreat where each center developed a pilot project, and developing an innovation fund to fund pilot projects. If pilot projects at each center with an FMRP are successful in either improving access to care or quality of care, then we anticipate these PCMH innovations will be implemented at our other sites as well.

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In Need of a Home: Families with Special-Healthcare-Needs Children Building Refuge

Karen Seawell Purcell, MLS/ET, MA

Sometimes meetings can be productive. An encounter at a bureaucratic-sounding meeting, the Virginia General Assembly “Child and Family Behavioral Health Policy and Planning Committee (330-F)” led to a multi-year partnership between two Richmond, Virginia-based organizations, Capital AHEC and Medical Home Plus. The collaboration strives to proactively address the educational needs of families, healthcare professionals, and students regarding special-healthcare-needs children.

The families of special-healthcare-needs children and youth often struggle for years before they receive the specialized information and resources the family requires. Special healthcare needs are needs centered on chronic or life-long conditions. Examples might be cerebral palsy, diabetes, learning differences, autism spectrum disorders, or developmental delays. Disorders often are co-morbid, creating complex and entangled symptoms. In addition, clues to the child’s condition are intertwined with the child’s growth and development, which may also be atypical. For example, the child with attention deficit disorder may also struggle with anxiety, depression, and an eating disorder. These complex, vulnerable children live in the context of complex, vulnerable families. No matter what the socioeconomic background, special-needs families are stressed emotionally and economically. Parents are twice as likely to divorce. And, families spend inordinate amounts of money on health care. But because the family sees the child daily over time, the family, no matter how worn and tattered,

Children and youth presenting with special healthcare needs often represent 90% of pediatric patients encountered in the CAHEC region’s urban/rural healthcare facilities according to anecdotal evidence.

is the best source of information about the child. “Family involvement” means asking good questions and listening, viewing the family as equal participants in the care of the child. Parents are the experts on the child’s condition and needs despite barriers of culture and language.

The medical home provides special-needs families with a “one-stop” shop where diagnosis, assessment, case management, and therapy is coordinated across multiple systems. Such systems may include health, education, justice, and, behavioral health. Family involvement through good communications again is a critical component of a special-healthcare-needs medical home. Patient advocacy often means assisting the family in the procurement of needed services for the child outside the healthcare facility. Follow-up is an important aspect of quality care. Medical Homes can have many configurations dependent upon the imaginations and resources of the professionals involved. Continuing education needs may encompass learning—to locate evidence-based information about alternative therapies, to build relationships with child psychiatrists to integrate care, to understand legal rights and legal communication tools, to communicate multi-culturalism, and to deal with the stresses of caregiving on the part of healthcare providers and families.

Children and youth presenting with special healthcare needs often represent 90% of pediatric patients encountered in the CAHEC region’s urban/rural healthcare facilities according to anecdotal evidence. But child special healthcare needs, particularly in



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the area of behavioral health, are an issue throughout the Commonwealth according to a number of legislative committee, state agency, and advocacy group reports.

Medical Home Plus, Capital AHEC's partner in continuing education activities centered on child special healthcare needs, was founded by two pediatricians who saw a need to promote the pediatric medical home concept to meet the needs of special-healthcare children not only in Virginia but nationwide.

While other organizations have joined in partnership with Medical Home Plus and Capital AHEC, Medical Home Plus has provided primary leadership in the initiative to educate healthcare providers and students regarding special-healthcare-needs children. Capital AHEC is somewhat of an important but junior partner providing financial assistance and educational planning and implementation expertise.

The goals of the four-year-old partnership with Medical Home Plus from the perspective of Capital AHEC are threefold. The first goal is a "traditional" AHEC one to reduce professional isolation and to increase the retention of the primary care workforce through education and training in the area of caring for special-healthcare-needs children. Special-healthcare-needs children were a growing concern in the Commonwealth of Virginia even before the Virginia Tech Massacre orchestrated by a special-healthcare needs youth. The second goal is a Virginia legislative-mandated goal of AHEC involvement in consumer education. This allowed activities to focus on both the non-professional and the professional learner to insure that families participated in learning side-by-side with healthcare providers. The third and

related goal, as noted earlier, was to use the constructs of "family involvement" and "medical home" as a basis for educational planning and programming. Many of the primary care providers, board members,

and professionals associated with Capital AHEC and Medical Home Plus reflect the demographics of the United States and are special needs parents themselves. This inside, intimate knowledge of the needs of the healthcare worker, the child, and the family means

that good communication and quality care are seen as an integral aim of both process and outcomes.

Early project outcomes have been focused on learner satisfaction with the learning experience, on simply making available information that is not always easy to obtain for either providers or families, and on creating connections among professionals, families, and organizations. Workshops have focused on legal letter writing and pediatric-child psychiatry collaborative practice. An annual conference, "Strong Roots for a Healthy Future," has for three years brought the expertise of Virginia's academic medical centers, child advocacy organizations, state education and health agencies, and child welfare groups to southwest, central, and eastern Virginia. Learners indicate that the activities are places of refuge and reduce the isolation experienced by professionals and families. To keep connections going, Medical Home Plus collects the e-mail and other contact information of activity participants to use for future workshop and conference notification.

The success of this collaborative educational initiative to date means that plans are already underfoot for the fourth annual "Strong Roots for a Healthy Future" conference. The collaboration continues.

Program Goals:

- 1. Reduce professional isolation and increase primary care retention*
- 2. Increase consumer education*
- 3. Employ the medical home model for educational planning and programming*

North Carolina's ICARE Partnership: Improving Access through Integrated Care

Sally Smith, RN, LCSW; and Russet Hambrick, MLS, AHIP

"ICARE's three-tiered, locally focused approach meets a critical and growing need in our state."

If you ask licensed clinical social worker Mark Boyd why integrated care is a good idea, he won't point you to research or statistics. He'll tell you a story:

Recently, a woman met with her primary care provider at Roanoke-Chowan Community Health Center (RCCHC), a *Federally Qualified Health Center* based in Ahoskie, NC. Struggling to accept the recent loss of her son in a car crash and a more recent separation from her husband of 35 years, she described herself as "overcome" and "at a loss to move forward." A referral for mental health services was clearly needed.

This would typically require a weeks-long wait for an appointment, completion of pre-certification paperwork, and a lengthy intake procedure at another provider's office. Not, however, at RCCHC's Ahoskie office, where Boyd practices full-time. Thanks to provider integration, the patient saw Boyd immediately.

"This is how care is supposed to work," said Boyd.

Successes like these are the key motivation behind a growing national movement to advance integrated care practices. Nowhere is this movement stronger than in North Carolina, home of The ICARE Partnership.

ICARE (www.icarenc.org) is a grassroots effort that brings together professionals from family practice, pediatrics, psychiatry, psychology, and other disciplines to improve the quality of and access to affordable

healthcare services. Specifically, ICARE seeks to:

- Enable more frequent collaboration among primary care providers (PCPs) and mental health, developmental disability, and substance abuse services (MH/DD/SAS) providers.
- Increase the capacity of PCPs to provide appropriate, evidence-based behavioral health services.
- Increase the capacity of MH/DD/SAS providers to screen and refer for physical illness.

ICARE's work is critical in North Carolina, where the availability of public mental health services is declining sharply, and the burden of caring for patients with mental disorders increasingly falls to primary care practices. Established in 2006 by a small group of health professionals—including the North Carolina AHEC Program and regional AHECs—ICARE has grown to comprise more than two dozen healthcare organizations and agencies across the state. It is funded through a mix of private and public sources, including the Duke Endowment, the Kate B. Reynolds Charitable Trust, AstraZeneca, NC., AHEC, the North Carolina Department of Health and Human Services, and the North Carolina Foundation for Advanced Health Programs.

The ICARE Model

The ICARE program is a natural extension of the pioneering work begun by Jim Bernstein, Tork Wade, Allen Dobson, and other public health visionaries who helped build Community Care of North Carolina (CCNC), a nationally recognized model



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North Carolina's ICARE Partnership: Improving Access through Integrated Care

of Medicaid care management. ICARE's statewide approach builds on the CCNC philosophy, developing the infrastructure and tools professionals need to operationalize integration of care. The ICARE model has three major components: training and education, policy change recommendations, and pilot programs.

Through onsite training, clinical consultation services, and Web-based education, ICARE offers

instruction on topics such as integrated care models, screening methods, crisis management, and billing and coding for mental health treatment. Through more than 70 training events, ICARE reached nearly 1,500 providers in 2007 alone. In addition, ICARE maintains a Web site with educational podcasts, billing and coding tools, screening tools and algorithms, and a comprehensive MH/DD/SAS resource directory. The site has received more than 1.6 million hits since October 2006.

ICARE develops policy change recommendations through a policy and process change committee. Composed of providers, stakeholders, and healthcare experts, the committee studies and recommends practice-based, community, regional, and statewide changes necessary to sustaining the integrated care movement.

ICARE's third component is a series of integrated care pilots. These pilots employ a local model development approach, allowing each program to implement individualized methods suited to its particular populations and concerns.

AHEC's Essential Role

ICARE would not exist in its current form without the strong support of the NC AHEC Program and regional AHECs that provide leadership, personnel, and

funding. Playing to their strength, regional AHECs are integrally involved in ICARE's education initiatives and play key roles in curriculum development and onsite training. Several AHECs have been involved in

ICARE pilots as well. Karen Stallings, RN, MEd, associate director of the program, contributes policy recommendations, and other AHEC officials provide guidance and leadership through ICARE's two

oversight groups: its advisory board and core steering committee.

"The ICARE story is closely linked to the North Carolina AHEC Program, an early champion of integrated care," said Tom Bacon, DrPH, director of NC AHEC. "ICARE's three-tiered, locally focused approach meets a critical and growing need in our state. The AHEC Program looks forward to its continued work with ICARE as it seeks to enhance access to quality health care for North Carolina communities."

Early Success

One example of ICARE's success is its western region pilot, which concluded in June 2008. The pilot focused on integrating patients with severe, persistent mental illness and at least one chronic physical health condition into primary care practices. The effort was led by case manager April Conner and professionals from Mountain AHEC, the local management entity, and Access II Care of Western North Carolina, the local network of the state's Medicaid care management organization. Through care coordination, Conner facilitated referrals, helped ensure treatment plan compliance, and made psychiatric consultation available to PCPs.

The pilot supported on average 80 patients, the majority of whom had bipolar diag-

Impact to date:

1. More than 70 training events for 1,500 providers in 2007
2. Web-based resources have received over 1.6 million hits since October 2006
3. Integrated care increased from 2% to 58% for mental health patients in pilot program.

North Carolina's ICARE Partnership: Improving Access through Integrated Care

noses. At launch in July 2006, fewer than 2% percent of Conner's clients received integrated care. Within two years, 58% of patient charts included documentation from a specialty mental healthcare provider, a release of medical information, or both. As a result of this success, Access II Care staff are now trained to monitor behavioral health conditions and collaborate regularly with behavioral health staff.

Like RCCHC's Mark Boyd, however, Conner believes the best proof of success is found in individual cases. After six months of coordinated case management, a bipolar client with a history of crack cocaine use was clean and sober, medically stable, and linked with primary care, mental health, and substance abuse services. "Two years ago, there would have been no contact between primary and mental health care, and these problems would have gone unaddressed," said Conner.

While final data are still being gathered through focus groups, self-reporting, and Medicaid claim analysis, early research indicates that these pilot projects improved access to local services. Patients report daily improved medical and mental health and PCPs have increased behavioral health referrals.

Future Challenges

For all its success, the ICARE program faces a number of challenges, not the least of which is securing additional funding in an uncertain economy to explore some of the more promising strategies identified in the pilots. While significant progress has been made at local levels, many institutional, regulatory, attitudinal and reimbursement barriers remain entrenched among the professional and public health communities.

ICARE advocates believe North Carolina needs an intergovernmental task force to address those barriers, and they cite the absence of such a group among their primary concerns. A lack of regional leadership also impedes the delivery of integrated care; while two regionally organized entities have been charged with coordination of services for Medicaid recipients and uninsured residents, there is no statewide directive as to how these organizations should cooperatively meet the needs of the populations they jointly serve.

Further concerns include reimbursement, workforce and communication issues. No integrated care effort can sustain without adequate provider compensation—professionals must be reimbursed for behavioral health screenings, consultations, and interventions.

Secondly, while ICARE has made significant progress in educating PCPs and behavioral health specialists, more must be done to support and promote care integration training in graduate, post-graduate, and continuing education programs. Additionally, obstacles to communication must be removed. ICARE partners suggest legislation that facilitates administrative and clinical information sharing. Stakeholders also cite overly restrictive federal confidentiality regulations and recommend the state lobby for revised statutes.

In the face of these concerns, however, ICARE advocates are encouraged by the program's considerable success to date and the clear promise of coordinated health services. The partnership plans to continue its work in North Carolina as long as necessary, further uniting North Carolinians behind the valuable integrated care model.

At launch in July 2006, fewer than 2% percent of Conner's clients received integrated care. Within two years, 58% of patient charts included documentation from a specialty mental healthcare provider, a release of medical information, or both.

Responding to Local Public Health Training Needs

Janet Place, MPH; Adrienne L. Joines, MPH, CHES; and Paula Dickson, MS, CHES

Like the United States as a whole, North Carolina is facing a critical public health workforce shortage and deep budget cuts. The challenge of training and keeping qualified personnel is greater than ever in order to provide high-quality public health services in a time when the slow economy is increasing the need for services.

of the Academy due to the regional structure of its nine district AHECs. Academy staff includes a program director and two research associates strategically placed in the eastern and western parts of NC. Each covers half of the state working with all nine AHECs. This team has developed a comprehensive process for assessing professional development needs of local public health departments and linking them to the most appropriate learning resources and tools. This includes a focused health department training needs assessment, discipline-specific self-assessment tools, and links to training resources through customized training resource databases. These discipline-specific tools, developed by NCIPH staff, focus on health directors, public health nurses, health educators, environmental health specialists, and public health social workers. Each self-assessment is based on a national competency set.

The research associates serve as liaisons between the local health departments (LHDs) and the training resources that can be provided primarily through the local AHEC and NCIPH. Staff conducts onsite focus-group-based needs assessments with local health directors and members of their management teams. The goal is to identify priority training needs of LHD staff as well as identifying barriers to training. Questions examine the strength of the AHEC partnership with the public health department, the availability and usefulness of current trainings, and the background and current skill level of the staff members. Research associates also orient the staff to the online resources provided through the Academy Web site.



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In 2005, The Duke Endowment awarded a three-year grant to NC AHEC and the NC Institute for Public Health (NCIPH) at the UNC Gillings School of Global Public Health for the NC Public Health Academy (the Academy). Additional funding comes from the Health Resources and Services Administration through the Southeast Public Health Training Center at UNC. The goal of the Academy is to strengthen local health department (LHD) infrastructure through targeted training that results in more efficient, effective public health resources and services. The Academy is not a formal training program, but instead represents a new way of continually assessing and responding to changing public health professional development and training needs. It is an evidence-based process that attributes its success to the NCAHEC/NCIPH partnership.

NCIPH has had a long-standing partnership with NCAHEC, with NCIPH staff trainers delivering a large number of AHEC-based public health trainings every year. NCIPH has a long history of providing public health training throughout the state through its Office of Continuing Education. NC's public health system is decentralized, with each LHD autonomously governed. NCAHEC serves as a natural mechanism for implementation



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Paula Dickson, MS, CHES, is a Research Associate with the North Carolina Public Health Academy.



NC local public health departments assessed by the NC Public Health Academy to date

Assessment results are compiled into a report that is shared with Academy team members and the LHD's regional AHEC. The Academy team then collaborates with the respective AHEC team to

Responding to Local Public Health Training Needs

connect the LHD to its determined training needs. “Regional AHECs are already considered the CE provider for most health professionals and they are geographically convenient to the counties they serve. Matching the needs assessment data collected by the research associates to the available resources at their regional AHEC made sense. This strengthens the existing relationships the AHEC already has with LHDs,” says Dawn Grant, Director of Allied, Public, and Dental Health Education, at Eastern AHEC in Greenville.

Results of the needs assessments have provided a wealth of data specific to its respective health department, but aggregate data show trends in training needs across the state. Thus far, 42 out of 85 LHDs in NC have been assessed uncovering a strong need for organizational capacity development, mainly driven by NC’s mandatory LHD accreditation. LHDs typically do not have adequate resources and support for the staff development activities required to address accreditation benchmarks. The highest priority training needs are: management/supervisory skills, (81%), frontline staff skills, such as customer service (78%), basic public health science skills (62%), quality improvement skills (66%), leadership skills (57%), and cultural competency skills (51%).

Cultural competency training is an annual requirement for LHDs with 51% of the assessed departments expressing it as their highest training priority. One example of how a regional AHEC was able to utilize data from an Academy needs assessment and meet an immediate need for cultural competency training occurred through Eastern AHEC in Greenville. Data from the assessment conducted at the Greene County Health Department in Snow Hill, NC revealed a challenge in providing an onsite cultural competency training to all of their employees. With assistance and follow-up from an Academy research associate, the local public health director was able to review available training resources provided through Eastern AHEC and schedule an appropriate time and agenda for an all-staff cultural competency training. Twenty-eight employees received the training.

In 2008 NCIPH evaluators conducted focused interviews with staff from the Eastern, Charlotte, Northwest and Mountain AHECs, and

several local public health directors. The results overwhelmingly reflect that the Academy has had a positive impact on the AHECs and that the partnership is successful. The assessment data is making it possible for both NCIPH and NCAHEC to make the right decisions when evaluating where to allocate limited public health training resources. The results found that the Academy has significantly strengthened the NCIPH and AHEC relationship, while increasing collaboration between the partners. Results also showed that Academy staff have greatly improved relationships and communication with LHDs. Historically, AHEC staff have been unable to conduct public health training needs assessments through any type of formal mechanism. “I wear a lot of hats. It’s nobody’s full-time job to focus on the public health sector in our region which is unfortunate. Having the research associate position full-time to focus on public health has really allowed us to go to the next level with our public health initiatives,” says Grant. Through the work of the Academy team, AHEC staff now have a greater understanding of what public health is and what workforce development challenges LHDs really face. They also have greater understanding of public health training resources and how to design programming appropriate to LHD needs.

There is a sense of optimism about what will be accomplished by the Academy and AHEC team in the future. Richard Etheridge, the Public Health Coordinator at Northwest AHEC in Winston-Salem, NC, says, “I think it’s secured an additional partnership [for AHEC] that will be helpful down the road, as this Academy grows and more people know about it and more people know how to access it and take advantage of what the Academy is doing, offering. I think, in the long term, there will be so much more happening.”

The Academy recently received a one-year grant extension from the Duke Endowment. The team will use the next year to focus on continued strengthening of partnerships between the AHECs, LHDs, and the NCIPH to link public health practitioners to targeted and appropriate training and professional development resources for meeting emerging public health training needs. For further information on the NC Public Health Academy, please visit: www.ncpublichealthacademy.org.

NAO would like to thank our Medallion Members for their continued support:

PLATINUM MEMBERS:

- *Mass AHEC Network*
- *AHEC of Southern Nevada*
- *North Louisiana AHEC*

GOLD MEMBERS:

- *California AHEC Program*
- *Nebraska AHEC Program Office*

SILVER MEMBERS:

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- *Cascades East AHEC @ St. Charles Medical Center*
- *Lake Country AHEC*
- *Northwest Oklahoma AHEC*



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NAO is the national organization that supports and advances the AHEC network in improving the health of individuals and communities by transforming health care through education.

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