COM Forms New Center for Distance Health

With its new Center for Distance Health (CDH), UAMS is well on the way to eliminating health care disparities in Arkansas.

The CDH was founded in July 2006 by Curtis Lowery, M.D., medical director of ANGELS and director of the Division of Maternal-Fetal Medicine, and Ann Bynum, Ed.D., director of the Rural Hospital Program at the University of Arkansas for Medical Sciences (UAMS). This new, innovative program combines expertise from the ANGELS telemedicine program and the Rural Hospital Program to allow UAMS to more effectively and efficiently respond to increasing demands for dynamic, contemporary health care.

First and foremost, the CDH will allow patients throughout the state to obtain specialized care in virtually any medical specialty, no matter their distance from the nearest tertiary center. As a conduit for distance health care activities statewide, the CDH will facilitate communications between UAMS and rural hospitals, the Department of Health and Human Services, insurance companies, and patients. Such activities will soon include two new efforts, currently in the works:

- **Correctional Telehealth**, which will deliver telehealth and high-risk obstetrical support for inmates of women’s prisons in Arkansas.
- **Pediatrics in Schools**, which will enable school nurses to consult specialists via telemedicine in an effort to treat and monitor childhood obesity, diabetes, asthma, and behavioral problems among students in rural Arkansas.

The CDH will also provide education to an array of participants, including health care providers, medical students and patients. Educational initiatives include:

- **Telehealth Resource Center**, which will provide the informational resources needed for any health organization to successfully and efficiently branch into distance health.
- **Train & Maintain**, a technology training initiative created by the CDH in association with the Arkansas Division of Health (DOH) to provide telehealth expertise to those who operate telemedicine equipment in Arkansas’ hospitals.

Finally, the CDH serves as an organized research and outreach network to faculty and staff at UAMS. As a part of the UAMS College of Medicine, it will not only coordinate distance health services for the College’s various departments, but will also provide technical assistance for telemedicine-related issues, as well as support for grant writing and research development.

By delivering both educational and clinical telehealth programs, the CDH firmly establishes UAMS ahead of the technology curve, while aligning UAMS with federal telehealth initiatives. More importantly, the new CDH is rapidly eradicating barriers to quality health care, no matter where a person may live.

For more information, visit the CDH Web site at http://www.uams.edu/cdh/default.asp.
Rural Colposcopy Clinic Succeeds Via Telemedicine

An irregular Pap smear can be a frightening thing, especially if you live hours away from the nearest gynecologist or have other difficulties in obtaining proper gynecological care.

To help these women, ANGELS is working to establish a network of colposcopy clinics throughout the state, building upon and extending its telemedicine program. The first such clinic, which opened in July, is located in the Hope unit of the Arkansas Department of Health and Human Services (DHHS). The Hope clinic is run by Delia James, A.P.N., a long-time DHHS employee, in collaboration with Martha J. Brewer, M.D., Nancy Andrews-Collins, M.D., and Alexander Burnett, M.D., of the Department of Obstetrics and Gynecology at the University of Arkansas for Medical Sciences.

“Delia [James] has been interested in providing this service for a while,” said Shannon Barringer, M.S., a program manager for ANGELS. “We have a long-standing relationship with her, and we’ve worked with her for years in high-risk obstetrics and genetics.”

The colposcopy clinic is yet another example of the efficiency of telemedicine. Patients who have received abnormal results from their Pap smears can schedule a colposcopy at the clinic. As James guides the exam, one of the UAMS Ob/Gyn faculty members follows it live via telemedicine, offers interpretations and answers any questions Delia or the patient may have. Appropriate treatment is then recommended, based on the results of the exam.

A definite need exists for more such clinics across the state. “There are many towns and even counties in Arkansas that don’t have an Ob/Gyn provider,” James said. “In other instances, there may be private providers, but they don’t accept Medicaid. This presents a problem for some residents with lower incomes. The DHHS accepts these patients and initiates early obstetrical care. We’re kind of a safety net.”

But this clinic is not just about colposcopies. “It’s also about being able to consult with patients who otherwise would not be able to receive treatment, and to help manage their cases,” said Brewer. “Arkansas is a very rural state, and many people have problems with access to health care. This clinic, and other telemedicine applications, is an economical way to take a doctor’s expertise and put it out in these rural areas.”

The colposcopy clinic in Hope is currently administered through a grant from the Office for the Advancement of Telehealth (OAT), a part of the federal Health Resources and Services Administration (HRSA). This grant was designated specifically to benefit women who have abnormal Pap smears. However, the grant may potentially be expanded for other uses, if additional funding can be found to cover the costs for indigent patients, especially those who are not pregnant. The clinic is a part of Arkansas BreastCare, a DHHS program that provides free screening, diagnosis and treatment services for Arkansas women.

ANGEL Eye Program Sees Rapid Growth

When parents must leave their infant in intensive care at the University of Arkansas for Medical Sciences (UAMS), they no longer have to worry about not being able to see their new child until the next hospital visit. The rapidly growing ANGEL Eye program is allowing more and more parents to watch their babies online, in the comfort of their own homes.

At its inception in February, ANGEL Eye had four cameras available in the UAMS Medical Center’s Neonatal Intensive Care Unit (NICU). As of the end of August, only six months later, 14 cameras are now online and able to be used by both NICU and the Neonatal Critical Care Unit, thanks to funds donated by the UAMS Auxiliary.

The cameras not only allow parents to see their baby; they serve as a convenient way for NICU nurses to share details of the baby’s life. “A lot of times, a nurse will put a little sign up in the crib that says ‘Your baby weighs two pounds today,’ or ‘Your baby had a bath today,’” said Shannon Lewis, a neonatal nurse with ANGELS.

The cameras are attached to movable IV poles and stationed at individual isolettes and warmers. Once a camera is assigned to an infant, the parents are given a password that allows them to access the camera through the ANGELS Web site. Using the ANGEL Eye program, parents can zoom in and take snapshots of their infant and e-mail them to friends and family. However, parents are not able to simply get online at any time to view their infant, even with a password. To assure privacy and conform to HIPAA regulations, infants will be on-camera for 15 minutes twice a day, seven days a week. Viewing times may be arranged by the parents between 10 a.m. and 3 p.m. and between 8 and 10 p.m. Once a time is scheduled, parents may share that information, along with their password, with family and friends, who will then be able to view the infant from separate computers.

Occasionally, technical issues do arise, which may be affected by the Internet provider or the type of transmission a person is using (dial-up sees more complications than does DSL, for example).

“We’re not 100% up and running,” Lewis said. “But our Call Center has been very efficient at getting our IT staff involved when necessary. There’s very rarely been a family that’s said ‘We’re not able to get on.’ They seem to be very happy with the service.”

ANGEL Eye is a part of ANGELS (Antenatal and Neonatal Guidelines, Education and Learning System), a nationally recognized telemedicine program.
Focus On… Barbara Smith, R.N., B.S.N., C.P.C.

The success of any program is dependent on its people. ANGELS is able to continually demonstrate outstanding success because of strong, dedicated people like Barbara Smith, R.N., B.S.N., C.P.C.

“I love my job,” Smith said. “It’s exciting because we can really see progress. And it combines nursing and teaching, two fields that I love.”

Smith channels her passion and knowledge of health care and education into managing the development of guidelines for best practices in maternal-fetal medicine and neonatology. “I see myself as a coordinator for it all,” Smith said. “I make sure that everything stays on track and that we’re where we need to be.”

That’s no easy task, and one that takes a great deal of organization and planning, as well as a familiarity with the language and procedures of medicine. ANGELS currently has 95 guidelines written by 54 principal authors, with another 20 in the planning stages. These guidelines are regularly updated, and new guidelines are continually being developed. Once a committee agrees upon topics to be developed for the year, Smith maintains contact with the authors to make sure deadlines will be met, and she is responsible for editing the first drafts. She then schedules weekly teleconferences, during which these drafts and case studies are presented for discussion and review by physicians and other providers in Arkansas. The reviewers offer comments, edits and other feedback to adapt each guideline to the specific needs found in the state. Smith follows the process until each guideline is finalized, and continues this work as each comes up for annual review. She also makes sure that all of the guidelines are available via the internet with the most current information.

In addition to the weekly High-Risk Obstetrical Teleconferences, Smith facilitates the monthly ANGELS Neonatal Teleconferences. She also played a key role in the newly developed Obstetrical Nursing Exchange in collaboration with the Rural Hospital Program, UAMS Labor and Delivery, and other nursing leaders. Each month, obstetrical nurses meet for a statewide nursing grand rounds via teleconferencing. The goal is to improve nursing care for women throughout Arkansas by improving education, communication and collaboration.

Smith puts her coding expertise to work by writing examples of how to properly code diagnoses for each guideline. She also serves as a resource for ANGELS if questions or projects about coding or billing issues arise.

Her duties don’t stop there. She led the recent project to convert all the existing guidelines to electronic format and distribute them statewide on CDs. She has been involved in statewide presentations about ANGELS and in efforts to publish specific guidelines in the Journal of the Arkansas Medical Society. She also arranges guest speakers and presenters at ANGELS teleconferences, writes job descriptions for ANGELS, works on policies and procedures for the program, coordinates patient education brochures, and regularly distributes information to providers across the state regarding the guidelines and teleconferences.

Smith has been a UAMS employee for almost 20 years and joined ANGELS in its early days in 2003. “When the ANGELS program came into existence, I applied because there were so many things that I thought the program could address, working as a statewide team. Everything we do is such a team effort. We’ve received so much support and cooperation from others, both within ANGELS and UAMS and from outside the program. That’s what really makes it work.”

ANGELS Call Center Offers After-Hours Help

The ANGELS Call Center is operated 24 hours a day, seven days a week and serves as a statewide resource for high-risk obstetrical patients and providers outside of the University of Arkansas for Medical Sciences (UAMS). The center facilitates telephone consultation between referring physicians in rural areas and maternal-fetal medicine physicians at UAMS. Communication is typically established between these physicians within minutes, allowing for immediate intervention in the care of the high-risk obstetrical patient. This service often allows the patient to remain in her hometown and still receive the specialized advice and care that before was only available at large medical centers.

Staffed by registered nurses, the Call Center can case manage and triage obstetric and neonatal services to Medicaid’s high-risk obstetrical enrollees. Nurses assess each patient via telephone, using the patient’s description of symptoms, and utilize algorithms based on software specifically written for the Call Center. If a patient requires prompt medical treatment, the Call Center immediately contacts the patient’s physician or directs the patient to the local emergency room. The Call Center also serves as an interface into the UAMS medical system, should such a referral be necessary. However, in over 80 percent of calls received by the Call Center, nurses were able to resolve the issue over the phone.

By using the Call Center, many patients have realized significant medical savings and health benefits. Twenty-four percent of 466 patients surveyed said they would have gone either to Labor and Delivery or to the Emergency Department for care, but after triage and assessment by a nurse in the Call Center, only 369 of these patients were referred for emergency care. Thus, 97 potential visits to the Emergency Department were avoided, decreasing medical costs and utilization of medical resources. In addition, 30 percent said that if the Call Center was not available, they would have waited for symptoms to worsen before seeking medical attention, potentially endangering themselves and their unborn fetuses.
ANGELS is making the most of its participation in the Care Management Learning Network, helping to facilitate many significant and far-reaching changes in our national health care system that will allow medical specialists to more effectively connect with the patients who need them.

The Care Management Learning Network is coordinated by the Agency for Healthcare Research and Quality (AHRQ). It has fostered a symbiotic relationship between several states, including Arkansas, to more effectively coordinate the care of patients who have chronic medical diseases or high-risk conditions, with an emphasis on managing the whole person. ANGELS is one of five Medicaid programs in the United States to participate in the Network. The five programs serve as models of how to develop patient care and outreach programs and will translate these programs into a workable model that other states may emulate.

The participating states are already realizing benefits from the AHRQ project. ANGELS and its patients are profiting from knowledge transfer activities, such as an AHRQ-facilitated Web conference about structuring pay-for-performance systems, including Pennsylvania’s successful ACCESS Plus program. In addition, the other participating states are very interested in duplicating some of the successes of the ANGELS program, particularly its statewide telemedicine program and its special focus on high-risk pregnancies. Through the interactions facilitated by this program, ANGELS has garnered recognition from state and federal policy makers and continues to hone its mission.

AHRQ, a part of the U.S. Department of Health and Human Services, sponsors and conducts research that provides evidence-based information on health care outcomes. With the information provided by AHRQ, patients, clinicians and health care leaders are better able to make informed decisions and improve the quality of their health care services.