It is Dec. 22, 2004. Sleet is pounding down, coating the roads with a hazardous layer of ice. Traffic in and out of Little Rock is gridlocked – drivers inch along, and many slide into ditches and other vehicles as they struggle to negotiate the slick roadways.

Ordinarily, a trip from Jacksonville to Little Rock takes about 20 minutes, or perhaps a half-hour. On this day, it is at least a five-hour, tension-filled drive ... and in a Jacksonville hospital, a pregnant mother who has just gone into premature labor desperately needs to be transported to Little Rock to receive the advanced medical care she and her baby will need.

Fortunately this time, an ambulance was able to make it through safely, and the mother and her baby were fine. But in rural regions of Arkansas, there can be many times when a mother’s life, and her baby’s, depend on rapid transit to advanced medical facilities in Little Rock, regardless of the road conditions. The ANGELS program is working to make sure these people have the best chances possible: in October 2005, it began Stork One, a high-risk obstetrics transport service that staffs ambulances, helicopters and fixed-wing aircraft with nurses specially trained to assess and provide medical aid to pregnant mothers prior to and during transport to the University of Arkansas for Medical Sciences (UAMS).

“If a patient has to travel from the furthest areas of the state, that means possibly three hours on the road,” said Terri Imus, R.N., manager of the ANGELS Call Center and an experienced obstetrics nurse. “The biggest problem we have in getting our high-risk obstetrics patients in is transportation. Our patients come from all over Arkansas, and while many areas have adequate ambulance services, others do not. And many times, these patients need to get here more quickly than an ambulance can actually travel.”

UAMS has a contract with Arkansas Emergency Transport in Little Rock for ground transport. Arkansas Children’s Hospital (ACH), a UAMS affiliate, provides helicopter service, as it has done for many years, and LifeNet in Texarkana transports patients via helicopter from southwest Arkansas. Jet-Med, a Little Rock-based, state-of-the-art air medical transport service, was recently added to the list for fixed-wing transport.

The addition of a fixed-wing service is vital to the Stork One program, Imus said. “A lot of times, in bad weather, fixed wings can fly when nothing else can because airports keep their runways clear,” she said. “They are also used for transporting over longer distances, since they don’t have to refuel as often as helicopters.”

The issue of refueling is an important one, since UAMS has transported pregnant patients from as far as Oklahoma City. A helicopter flying from Little Rock to Oklahoma City would need to refuel upon arrival, which would add precious time to an already-long flight. The state of Oklahoma was without a pediatric neurosurgeon,

(Continued on Page 3)
ANGELS Opens Independent Telemedicine Clinic

Nationwide, telemedicine is a rising paradigm that can effectively connect all levels of health care while reducing costs and increasing the availability of services to patients. ANGELS has developed the first free-standing telemedicine clinic in the state: The University of Arkansas for Medical Sciences (UAMS) Northwest Center for Distance Health, located in the Area Health Education Center (AHEC) Northwest in Springdale, Ark.

Extending the ANGELS philosophy from high-risk obstetrics to all subspecialties, the Northwest Center for Distance Health is the newest tele-link in the chain that is uniting education and clinical medical service across Arkansas. The Center was designed to provide communities with the benefits of telemedicine and to allow local physicians to connect with any subspecialty for consult support. This service allows patients to remain in the care of their primary care providers while receiving subspecialty consults without traveling long distances.

The center currently has a Tandberg Intern Video Interactive System, a PolyCom Educational Interactive Unit, a portable ultrasound machine and an electronic stethoscope, all of which facilitate televideo conferences and consultations.

A primary focus of the center is to provide prenatal genetic counseling to families who have members with birth defects or genetic disorders and to families who may be at risk for a variety of inherited conditions. Noelle Agan, M.S., C.G.C., a genetic counselor, and Susan Franklin, R.N., a genetic nurse, both provide counseling and also facilitate video conferences with physicians at UAMS.

“As providers of genetic counseling, we are trained to counsel anyone who has a question about a genetic disorder or a potential genetic disorder in their family,” Agan said. “We meet with families to discuss the impact of the genetic disorder on the family, provide testing options and assist in care management.”

As part of a team of genetic specialists at UAMS, Agan and Franklin are the only members not based in Little Rock. Through the ANGELS program, they are able to use telemedicine technology to provide genetic counseling to families across the state. In addition, the independent Northwest Center allows Agan and Franklin to see an ever-increasing number of patients in northwest Arkansas.

“We also see patients via telemedicine at Washington Regional Medical Center in Fayetteville and Willow Creek Women’s Hospital in Johnson,” Franklin explained. “Before this new center opened, telemedicine access was often limited to the bimonthly sessions scheduled at each hospital. Having a free-standing clinic allows us to serve a much larger area. Now, all patients from Benton, Madison and Washington counties have local access to genetic counseling and telemedicine.”

Julie Hall-Barrow, Ed.D., associate director of the UAMS Rural Hospital Program, agreed. “This center allows for a broader use of the counselors’ services,” she said. “If a family needs an immediate genetic consult, they no longer have to go through the anxiety of waiting for a hospital telemedicine clinic that may be a week or two away. Now, they can come to the center and see a counselor immediately.”

Supported by efforts of Rep. Marion Berry (1st Congressional District) and Rep. John Boozman (3rd Congressional District), ANGELS obtained a $347,723 federal grant to provide equipment for the UAMS Northwest Center for Distance Health. These funds are designated for telemedicine improvements at several sites, including the AHECs in Springdale and Jonesboro and medical centers in Clarksville, Helena and Mountain Home.

The AHEC Northwest, which provided clinic and office space for the center, supports the center’s efforts wholeheartedly. “A part of the AHEC mission is to provide educational access (Continued on Page 4)

Upcoming Best Practice Guidelines

In collaboration with volunteer family practitioners, obstetricians, neonatologists and pediatricians in Arkansas, ANGELS has developed several new guidelines for best practices. If you would like to participate in the review of one or more of these guidelines or a scheduled case presentation via teleconference, please contact the ANGELS Call Center at (501) 526-7425 or (866) 273-3835 to find the telemedicine site nearest you. (Continued on Page 4)
Focus on ... Shannon Lewis, R.N., B.S.N.

Caring for medically fragile newborns calls for a special sort of person with both strong medical knowledge and innate compassion. As a neonatal nurse, Shannon Lewis, R.N., B.S.N., has given these infants at the University of Arkansas for Medical Sciences (UAMS) the care they need for more than 10 years.

Lewis, the only neonatal nurse on the ANGELS staff, is a cornerstone for the program’s relations with obstetricians in outlying areas of Arkansas, who often transfer their high-risk maternity patients to UAMS.

“An important part of my job is to make daily rounds with the ob/gyn physicians every morning as they visit the high-risk patients who have been transferred to UAMS from rural hospitals,” Lewis said. “I send information back to the referring doctors about those patients, call to let them know if their patients have delivered and keep them posted on their patients’ care during their stay at UAMS.”

Lewis also works closely with the ANGELS neonatologists, who see their newborn patients at both UAMS and Arkansas Children’s Hospital (ACH). Her primary focus here is to help them develop a neonatal branch of the telemedicine program ANGELS already operates in obstetrics and gynecology. Such technology would facilitate consultations between neonatologists and a pediatrician several hours away who needs to determine whether a premature baby should be transferred to Little Rock. Telemedicine would allow the neonatologists to immediately observe the baby, as well as the baby’s X-rays, while talking with the pediatrician. Lewis said that this project is currently being piloted in Texarkana.

Lewis is also part of a team that is developing neonatal evidence-based guidelines. This team includes UAMS and ACH neonatologists, as well as nurse practitioners from ACH. ANGELS will distribute these guidelines to pediatricians throughout the state to promote best practices in the care of neonates.

Lewis has been a neonatal nurse and a UAMS employee since 1992 and clearly considers her career a rewarding one. She has served as a staff nurse, a charge nurse and a specialty nurse in neonatal intensive care. Before coming to ANGELS, she was a nurse manager for the UAMS nursery.

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STABLE Course Set for January

A course on the STABLE program will be presented to all UAMS telemedicine sites on Friday, Jan. 6, 2006. The eight-hour course will begin at 7:30 a.m. The course will be presented by Sandy Bennett and the UAMS Staff Development Office.

The STABLE (Sugar, Thermoregulation, Airway management, Blood pressure, Lab values, and Emotional support) is a neonatal continuing education program that focuses exclusively on the post-resuscitation and pre-transport stabilization care of sick newborns.

This class is designed for nursery nurses.

For more information, contact Sandy Bennett at (501) 686-7143.

“I’ve been with ANGELS for a year now,” she said. “I love the people I work with, and I enjoy the many facets of this job — it’s very rewarding to be able to do so many different things. I’m able to work closely with the physicians, and I’ve been able to offer something to ob/gyn with my neonatal expertise. A real ‘plus’ is that I’ve also learned a lot about the obstetrics side of nursing.”

22nd Annual Conference on Perinatal Care

The 22nd Annual Conference on Perinatal Care will be held Thursday and Friday, April 13 and 14, 2006, at the Peabody Hotel in Little Rock, Ark. Topics will include obstetrics and neonatology. For more information, contact Brenda Campbell at (501) 686-5847.

Nov. 17 Neonatal Guideline: Meconium Aspiration
Dec. 1 High-Risk Obstetrical Case Presentation
Dec. 8 High-Risk Obstetrical Case Presentation
Dec. 15 Neonatal Guideline: Polycythemia
Jan. 5 Recurrent Pregnancy Loss
Jan. 12 High-Risk Obstetrical Case Presentation
Jan. 19 Neonatal Guideline: Follow-up of the Preterm Infant
Jan. 26 High-Risk Obstetrical Case Presentation
Feb. 2 Medical Management of Ectopic Pregnancy
Feb. 9 High-Risk Obstetrical Case Presentation
Feb. 16 Neonatal Guideline: Pulmonary Hypertension
Feb. 23 High-Risk Obstetrical Case Presentation

To health care providers in areas of the state that do not have such services, which is exactly what this center is doing,” said Ann Bynum, Ed.D., associate director of the AHEC Program.

Whether the patient is a mother who is going through a complicated pregnancy and requires a level 2 ultrasound or someone who is on an organ transplant waiting list and needs to meet with specialists at UAMS, the UAMS Northwest Center for Distance Health facilitates communications between patients and medical professionals . . . and as a result, improves these patients’ quality of life.