



# the ANGELS REPORT

## Grant Projects Updates

By Adam Rule and Heidi Charton

### We've given birth, now we're growing up



We are proud to be designated as a regional Telehealth Resource Center or TRC. Our goal is to put a strong emphasis on learning and retention of telehealth training throughout Arkansas, Tennessee, and Mississippi.

To this end our training material will be fun and engaging for the user. The first milestone is our website launch on March 1.



We are excited to be on-track and busy developing material. Our team is assembled and will be coordinating outreach visits in the spring of 2011.

## Delta Interactive Solution to Collaborate Over Video for Education and Resources for Maternal Child Health Leadership (DISCOVER MCH)

The goal of the DISCOVER MCH Leadership grant is to provide continuing education for physicians and nurses, specific to maternal-child health, throughout the eight state Delta region through live teleconferences and enduring online material. Collaborative efforts are underway with the LEND program, the Delta Regional Authority, Arkansas' Title 5 agencies, and the Arkansas Minority Health Commission. The Delta Regional Authority is eager to help DISCOVER MCH determine which counties or parishes will be eligible for the program's services and will help contact the eligible areas. In addition to these collaborative outreach efforts, several out-of-state advisory board members have been recruited. In order to orchestrate and maintain this regional program, several key members of the DISCOVER

team will attend a Washington, D.C., meeting in early February for the Diversity in MCH Training Peer Learning Collaborative Kickoff Meeting. Finally, newly purchased online applications will enable us to record our teleconferences for use as enduring materials on the web, to aid in participant registration, and to make signing up for a continuing medical or nursing course a user-friendly and efficient process.

ANTENATAL  
& NEONATAL  
GUIDELINES,  
EDUCATION AND  
LEARNING SYSTEM

4301 W. Markham St.  
#518

Little Rock, AR 72205

Telephone

(501) 526-7425

Toll Free

(866) 273-3835



ANGELS

UAMS

UNIVERSITY OF ARKANSAS  
FOR MEDICAL SCIENCES

ARKANSAS DEPARTMENT OF  
HUMAN SERVICES



## Pediatric Update

by Julie Hall-Barrow & Shannon Lewis

### Tele-nursery



Through collaboration with the National Institute of Health, Tele-nursery now serves 23 nurseries around the state for census rounds, transports/back transports and neonatal consults, as well as other subspecialty consults such as genetics, cardiology endocrinology through the use of telemedicine. During one of these census rounds, which lasts about 10-15 minutes, Dr Whit Hall may have questions from general pediatricians in the state on a specific patient in their nursery. Community physicians may need an opinion from a neonatologist or other subspecialist, which they usually wouldn't have access to, but with the

use of telemedicine, Dr. Hall and other subspecialists have been able to consult interactively. Being able to visualize the neonate and any imaging allows more accurate treatment recommendations, such as the need to transfer. Just as important, community physicians have been willing to share their clinical material with UAMS faculty and students, showcasing the excellent care provided by the community hospitals and contributing to the educational mission of UAMS.

With tele-nursery and telemedicine, equipment has come to the development of the Tele-laryngoscope by Dr. Whit Hall. He states that during pediatric residency, the pediatric residents get less time in the NICU setting during their three year residency training than they did in the past, only around 4 months. Further, intubation skills are often lessened

without the constant practice found in training. Dr. Hall has helped design a laryngoscope blade that is a small enough to be used in the intubation of preterm babies, that will attach to a tele- laryngoscope connected to a light source on telemedicine equipment. This tele-laryngoscope can be used at a distant site and Dr. Hall or another neonatologist can guide the intubation of these difficult preterm neonates with the camera being on the end of the laryngoscope. Dr Hall can then direct an intubation at a distant site. He has taken the Tele-laryngoscope to Baxter County Regional Medical Center in Mountain Home to partner with pediatrician Dr. Perry Wilbur in using this equipment as a pilot project. Ultimately this equipment can be used for clinical purposes in community nurseries.

## Telemedicine Update

by Rosalyn Perkins



I am sure we can all agree that road trips can be fun, but to most, a road trip to see a specialist that is 2-3 hours away may not be as much fun. This is what telemedicine provides, specialty care without the road trip.

ANGELS is pleased to announce the opening of our most recent Russellville site which will provide more access to our rural communities. We now have 26 sites across Arkansas for healthcare access.

### Telemedicine tips:

- Medicaid, Medicare and most private pay insurance carriers pay for Telemedicine
- Fetal echocardiography is provided via Telemedicine
- OB Cardiology consults are provided via Telemedicine
- OB services such as MFM-Genetic consults; High Risk consults, Colposcopy, and Diabetic consults can all be accommodated via telemedicine. Contact the ANGELS @ 1-866-273-3835 Rosalyn Perkins, MNSC, WHNP-BC Telemedicine Clinical Director

## Teleconferences and Guidelines Update

by Barbara Smith



Interactive video teleconferences provide the capability of distance learning and collaboration unheard of just a few short years ago. Physicians, nurses, and other health care professionals can now participate from many local sites in educational events previously offered only in an academic medical center environment.

### Regularly Scheduled Teleconferences

- **OB-Gyn Grand Rounds:** Weekly on Wednesdays, 7-8 AM\*
- **High Risk Obstetrics Teleconference:** Weekly on Thursdays, 7:00-8:00 AM\*
- **FAIM (Fetal Anomaly Interdisciplinary Management) Teleconference:** Monthly on the fourth Friday, 7:30 -8:30 AM\*
- **ONE Team (for Nurses)** weekly on Fridays, noon – 1 pm\*\*  
Obstetrical Exchange: First Friday  
Neonatal Exchange: Second Friday  
APN Exchange: Third Friday  
Pediatric Exchange: Fourth Friday

\*Continuing medical education credits can be earned.

\*\*Nursing continuing education credits can be earned.

**OB/Gyn Grand Rounds** has been an integral educational component of the UAMS obstetrics and gynecology department for many years. It is now available via interactive video teleconferencing and offers relevant clinical and research presentations on topics relating to obstetrics, gynecology, and women's primary health care.

**The High Risk Obstetrics Teleconference** begins with a case study on the topic to be discussed. Physicians across the state participate with specialists from multiple disciplines such as maternal-fetal medicine, neonatology, anesthesiology, psychiatry and internal medicine and contribute current expertise and management practices.

**FAIM**, Fetal Anomalies Interdisciplinary Management, teleconferences enter their third year, with discussions regarding perinatal care of babies with abdominal wall defects, ambiguous genitalia, urinary tract abnormalities, and heart defects. Specialists, including pediatric surgeons, urologists, geneticists, cardiologists, neonatologists and obstetricians review the newest and the most-proven medications and techniques to optimize the health of these babies. A parent panel was also convened this past year, to help educate healthcare providers regarding the emotional impact that having a baby with significant medical needs brings to a family.

Our statewide nursing teleconference, ONE Team, has enjoyed collaborating with nurses across the state to provide education for obstetrical, neonatal, and advanced practice nurses on the first, second, and third Fridays of every month. A collaboration with Arkansas Children's Hospital was launched in January of 2010 to add pediatric nursing teleconferences on the fourth Friday of every month.

The schedule for upcoming teleconference topics is available on the ANGELS website at <http://www.uams.edu/angels> (Teleconferences and Guidelines section). For more information, visit our website or email [smithbarbaral@uams.edu](mailto:smithbarbaral@uams.edu)



## Call Center Update

by Donna Williams



### Call Center-Nurse Triage

One of our biggest changes since the fall newsletter has been the addition of 'second level triage' for UAMS OB/Gyn patients. We are now routinely contacting a resident before sending a patient to the ED (and often times before sending to L&D) to obtain second level triage. In November, this resulted in approximately 100 fewer ED/L&D visits and in December approximately 40 fewer ED/L&D visits. We also ask the patients a 'predisposition question,' such as what would you have done had this triage service not been available to you?, etc. Many patients state they would have gone to the ED or LD. Out of these predisposition questions, we estimate another 109 ED/LD visits avoided in November and 100 in December.

We are also using APNs for second level triage in the case of patients triaging out to be seen quickly in the clinics. When the APN or MD authorizes an appropriate overbook into the clinic, the ANGELS Appointment Center is quickly scheduling the patients. A greater sense of patient satisfaction has been recognized.

### After-hours OB Triage for Arkansas Department of Health patients

We have been working with the Maternity division of the Arkansas Department of Health (ADH) over the past several months to work out a process for providing OB triage after-hours for their OB population. We are waiting for final contracts to begin a pilot with the Miller County Health Department. OB patients that have only had access to the ED for medical concerns after the HD closed will be able to call the ANGELS Call Center for triage. We anticipate many unnecessary ED visits will be avoided and patients will receive care advice and support needed. We will also be offering second level triage to this population.

### AR SAVES- super user training continues

ANGELS/CDH Call Center supports the AR SAVES (telestroke) program. All of our full-time nurses are trained to facilitate the emergent stroke call and make the interactive video connection needed to provide the neurologist consult. The call center FT nurses also instruct the referring hospital's nurses in performing the NIH stroke scale during frequent 'MOCK drills' over interactive video. We have identified another two nurses for 'AR SAVES Super User' status. They will receive a higher level of training and will be trainers/resources for the other call center nurses.

Congratulations to Becky Ragsdale, and Sara Carmichael as being identified as 'AR SAVES Super Users'.



Becky Ragsdale



Sara Carmichael

I would also like to welcome David Knotts to our Call Center IT group. He is working night shift and will also be working with our LVM triage database.



David Knotts

## ANGELS Staff to Present at American Telemedicine Association Conference

by Laura Rakes



Every year, ANGELS, as a national leader in telemedicine innovation, has a strong presence at the American Telemedicine Association's annual conference, and the 2011 conference will be no exception. In December, the American Telemedicine

Association announced accepted presentations for their 2011 annual conference, and for the second year in a row, ANGELS had an astounding twelve presentations accepted. Of special note, Dr. Curtis Lowery will hold a presentation with Dr. Gene Gessow and Dr. William Hogan about the role telemedicine plays in healthcare reform. Additionally, Dr. Julie Hall-Barrow, along with two colleagues from University of California – Davis and the University of Rochester Medical Center, will offer conference-goers a Professional Development Certificate Course on pediatric telemedicine management. A complete list of presentations and presenters follows:

### Presentation Panel

- "Health Care Reform and Telemedicine: ACO's to Pay for Performance" — Curtis Lowery, MD; Gene Gessow, JD; William Hogan, MD; and Julie Hall-Barrow, EdD

### Professional Development Certificate Course

- "Pediatric Telemedicine Start Up to Sustainability: Inpatient, Outpatient and Program Management" — Julie Hall-Barrow, EdD; James Marcin, MD; and Neil Herendeen, MD

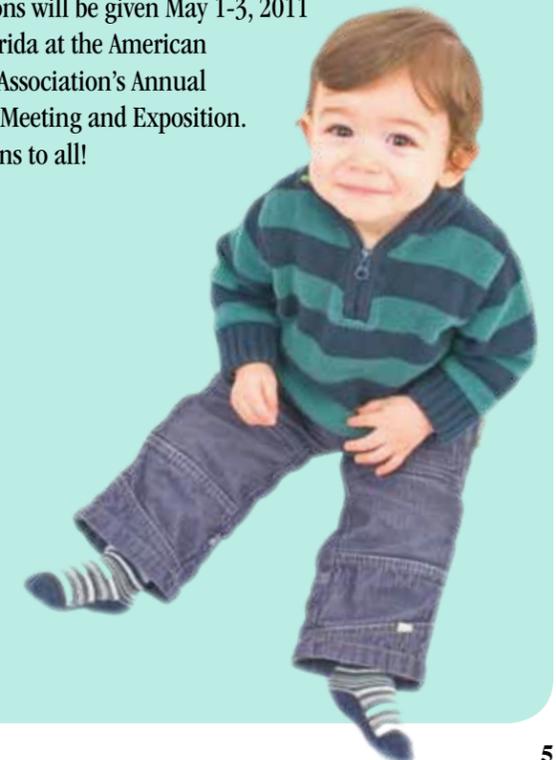
### Oral Presentations

- "Connecting Faces with Names: Telemedicine-Based Nurse-To-Nurse Report" — Donna Williams, RN; Stacy Pitsch, BSN, RNC-NIC; and Julie Hall-Barrow, EdD
- "Door-to-Needle Times: Improving a Successful Tele-stroke Intervention" — Julie Hall-Barrow, EdD; Terri Imus, BSN; Loretta Williams, BSN; Tammy Northcutt, BSN; and Debra Johnson, BSN
- "Rural State—Robust Telemedicine: Strategies for Statewide Telemedical Saturation" — Curtis Lowery, MD; Tina Benton, RN, BSN; Michael Abbiatti, EdS; Ed Franklin, EdD; and Michael Manley, RNP
- "Telecolposcopy: Improving Interventions for the Most Preventable Form of Cancer" — W.C. Hitt MD; Tesa Ivey MSN, APN; Lisa Harmon MSN, APN; Delia James APN; and Gordon Low MSN, APN

### Poster Presentations

- "Discerning Successful Telemedicine Applications for Obstetrics and Neonatology" — William Greenfield, MD; Terri Teague-Ross, MS; Shannon Lewis, BSN, RN; Stacy Pitsch, BSN, RNC-NIC; Elizabeth Kim, MD; Julie Hall-Barrow, EdD; and Whit Hall, MD
- "Echoes of Innovation: Preliminary Outcomes of Perinatal Telemedicine Echo Programs" — Curtis Lowery, MD; Tina Benton, RN, BSN; Renee Bornemeier, MD; Lori Heil, RDCCS; Rosalyn Perkins, MNsc, APN; Mandi Dixon, RDMS; and Terri Teague-Ross, MS
- "No Longer An Island: Rural Nurse Practitioners Gain Support through Telehealth" — Gordon Low, MSN, APN; Sarah Rhoads, DNP, APN; Delia James, MNsc, APN; and Tesa Ivey, MNsc, APN
- "Seeing is Believing: Telemedicine Improves Access to Genetics Consults in a Rural State" — Terri Teague-Ross, MS; Shannon Lewis, BSN, RN; Whit Hall, MD; and G. Bradley Schaefer, MD
- "Stopping Tobacco, Starting Changes in Pregnancy Care: Telemedicine-Based Provider Education" — Stephanie Wyatt, MNsc, WH-APN(c); and Sarah Rhoads, DNP, APN
- "Using Telemedicine to Facilitate Responsible Neonatal Transports Saves Money and Time" — Terri Teague-Ross, MS; Anne Marie Morse, EMT, CFC, CMTE, OCS; and Whit Hall, MD

All presentations will be given May 1-3, 2011 in Tampa, Florida at the American Telemedicine Association's Annual International Meeting and Exposition. Congratulations to all!



## Arkansas Healthcare, Higher Education, Public Safety, & Research Integrated Broadband Initiative

by Brenda Pick



On August 18, 2010, the National Telecommunications Information Administration (NTIA) within the Department of Commerce announced award funding (\$128,581,820) for the Arkansas Healthcare, Higher Education, Public Safety, & Research Integrated Broadband Initiative, a grant proposal submitted by the University of Arkansas for Medical Sciences in partnership with Arkansas Research and Education Optical Network on behalf of a range of statewide partners.

### Introducing the BTOP team

The Broadband Technology Opportunities Grant (BTOP) Program Director will lead the team of six program managers and two project specialists in the execution of this grant. Under the guidance of Debbie Green, the program managers will collaboratively work with vendors, end-users, and UAMS Network Management to establish or upgrade broadband connections at 474 healthcare and education sites across Arkansas in preparation for installation of interactive video equipment. Once the equipment is installed, the program managers will build relationships with end-users to encourage utilization of the interactive video equipment by making site visits, providing additional training, and offering application recommendations.

Although all members of the team have not yet begun employment (two program managers and two project specialists will begin soon), we are pleased to introduce these individuals who will be facilitating broadband across the state:



Deborah Green

Debbie joined the Center for Distance Health BTOP team as the Program Director on January 3, 2011 to provide leadership for the implementation and deployment of broadband to community anchor institutions to be used in telemedicine, education and training, which is funded by the BTOP grant. Her vast experience in personnel management, project management, telecommunications networking, systems implementation, and health care more than equips her for the challenges of this enormous undertaking. Debbie's hope for the state of Arkansas

through BTOP is statewide accessibility to education, training, and healthcare delivery and records. As healthcare availability decreases in rural areas, this program will assist in creating new options for delivery of care while allowing people to stay in their own areas, reducing costs to the patient. Debbie feels the most important attribute of the program is the promise of improved healthcare and education accessibility for the citizens of Arkansas, particularly in rural and underserved areas of the state. For recreation, Debbie enjoys reading, listening to music, and outdoor activities.



Alan Faulkner

Alan joined the BTOP team as a program manager on January 10, 2011 after having spent the past 16 years working in a television news/broadcast journalism environment, with duties that included managing the day-to-day operation of news departments. His experience in implementing new technology and training of staff, upgrading two television stations from a linear to a non-linear video system, and implementing various computer systems provides an outstanding foundation for the work he will be doing in the BTOP project. Alan hopes the BTOP program will bring more efficient health care and education to all people in the state of Arkansas. He believes the most important aspect of BTOP is the ability to provide quality health care to those who do not currently have access to it. When he isn't working, he enjoys fishing, hunting, and being outdoors.



Allen Finne

Allen joins the BTOP team as a program manager on 1/24/11 after having spent several years working in a television news/broadcast journalism environment. His expertise involves video servers and associated infrastructure, fiber, microwave, and broadcast distribution systems. He brings to this project supreme organizational skills and his penchant for the challenge of technical projects. Allen believes the most important components of BTOP are increased access to health care and health education. For recreation, Allen enjoys road bicycling, photography, and amateur radio.



Brenda Pick

Brenda has been with UAMS since 1985 with the exception of a one-year departure. Brenda re-joined the Center for Distance Health on December 1, 2010 as a program manager on the BTOP Team. Her experience in successfully leading the COSIG (Co-Occurring State Incentive Grant) Project to implement telemedicine services in 38 Arkansas Behavioral Health Centers prepares her for the tasks ahead. Having been a part of ANGELS since its inception, Brenda has witnessed first-hand how telemedicine allows physicians and other providers to give more care to more people in more remote places and provide more preventive services, with the prospect of improving the health of Arkansans in ways that not long ago sounded like science fiction. Brenda's recent visit to her hometown of Cove, population 380 with an estimated median household income of \$23,037, was a startling reminder of the poverty facing rural areas. It is her hope that this project will enhance the economic development in towns such as Cove throughout Arkansas. For recreation, Brenda enjoys reading, writing, genealogy research, interior design, watching movies, and floating the Buffalo River.



Michael Wallace

Michael joins the Center for Distance Health BTOP team as a Program Manager. Michael is experienced in business and technology solution delivery, having worked with federally qualified health centers and community mental health centers in Arkansas and across the nation; having experience with banking mergers and IT projects; and reviewing grants for the Department of Commerce Broadband Technology Opportunity rural health programs and Health Resources Services Administration. Michael believes that while the BTOP technologies and connectivity are impressive and will bring unimagined benefits, it is the opportunity to create new insights, enhance healthcare relationships, challenge the imagination, realize the hopes and ease the fears of those we serve that are the most important features of BTOP. Michael's vision is that we are inventing the future; we are "imagineering" what can be. When he isn't working, Michael enjoys hunting, teaching gun safety, and listening to Big Band music.

### IT members of the BTOP team



Brandon Brown

Brandon joined the BTOP team as a Network Planning Analyst in November 2010. His primary role in BTOP is telemedicine infrastructure support and project coordination for the BTOP sites. Brandon brings to the project excellent teaming skills and knowledge of the equipment that will be installed at the BTOP sites along with 10 years experience with video conferencing and telecommunications initiatives. For the short-term, Brandon hopes that Arkansas receives a state-of-the-art broadband solution that will enable advanced healthcare as well as other benefits that aren't currently available to rural Arkansas. His long-term hopes are for Arkansas to be the visionary and cornerstone of empowering communities through technology and to be the "resident expert" for the country. When he isn't working, Brandon enjoys spending time with his wife, Amanda, and daughter, Ella Kate... and doing anything outside (hunting, fishing, etc.).



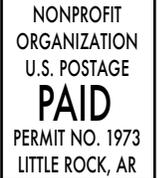
Jay Maples

Jay joined the Center for Distance Health BTOP team on December 1, 2010 as a Network Planning Analyst. Over the past eight years, Jay has a varied background supporting end-users and network, computer, server, and video applications. Jay's hope is that BTOP will grow and reach its maximum potential. For recreation, Jay enjoys creating electronics and music.



Jason Whittington

Jason joined the Center for Distance Health BTOP team on November 8, 2010 as a Network Planning Analyst. Jason has a strong video-conferencing background through his involvement with designing, installing, and servicing systems over the last 7 years. Jason's hope is that BTOP will keep growing to allow people to receive expedited access to all types of medical care anywhere they may be. For recreation, Jason is a musician and a voice-over talent.



## Outreach Update

by Michael Manley



Just when you think things are mellowing out, there is always something new popping up around here! Since the inception of ANGELS, it has always been about the patient. Not only is that with access and education, but will now expand to safety as well. We are partnering with the new UAMS Simulation Center to help with training and debriefing of students and health care deliverers in Arkansas. The airline industry has been light years ahead of the medical industry in this endeavor. Now with the new high-fidelity simulation trainers, we are able to run scenarios and debrief the learners in difficult birth

situations. Not only do we have 2 suites in our new Simulation Center in Little Rock, but we are also going to be in a position now to do the same thing in-situ at the local hospitals. This training is not just for physicians, but is programmed around interdisciplinary teams at all levels. We don't work as health care professionals in a vacuum in our environments, so why should we train that way. This technology is going to make us stronger and safer as clinicians, which is the right thing to do for the patients.

We are also still busy with setting up our next two clinics in Pine Bluff and Blytheville, as well as hosting and

visiting outside programs such as Oregon Health Sciences in Portland. They are modeling the ANGELS program to help connect Portland, Eugene and Medford. We traveled there to talk about our experience on not only the high-risk side, but the neonatal component as well. They have a lot of work to do still, but I believe the players realize what a benefit this would be to their programs as well as the patients that need to be served.

People can continue to debate about whether health care reform needs to happen or not, and we will continue on Making Heath Care Happen for the state of Arkansas and throughout the country.