Welcome back to the Pediatric Pulse, the Kentucky Children’s Hospital (KCH) newsletter for referring physicians. In this quarterly newsletter we provide updates on the happenings at Kentucky Children’s Hospital in addition to information on new or interesting services we offer.

As we predicted in the November issue, the opening of progressive care beds on 4N has successfully decreased our wait time in the ER for admitted patients while at the same time improving our availability of PICU beds for seriously ill children. Our thanks go out to the KCH Executive Development Council for making this unit available for pediatric use so quickly. We are currently working with the council and the UK HealthCare administration to refurbish the inpatient floor of KCH and help develop a minor procedure area for sedation and infusions along with minor procedures. Hopefully we will have more on this in the next newsletter.

In this issue James Liau, MD, will review the cleft lip and palate clinic located in Kentucky Clinic. Also included is a discussion on our approach to neonatal abstinence syndrome (NAS) and a list of services offered at KCH.

I continue to remind you that numerous Kentucky Children’s Hospital records are now available through the UK Physician Portal. The most utilized information to date is the online discharge notes from the newborn nursery and units, along with lab results and procedural notes. More and more daily progress notes are also being made available online. Our liaisons will be glad to show you or your office staff how to access the portal.

I also urge you to contact me if we have not served you or our patient well. In my experience, most issues revolve around communication problems, and a quick call may help correct things. If you need to contact me, do so at 859-323-1432 or 859-323-8511 or call UK•MDs toll free at 1-800-888-5533 to page me. My email address is cwall4@uky.edu.

Carmel Wallace, MD
Chair, Kentucky Children’s Hospital
Department of Pediatrics
Division Chief, General Academic Pediatrics

To refer a patient, please call
UK•MDs at 1-800-888-5533.

If there is a topic you would like addressed in our next quarterly issue, please contact Tarra Crane at 859-257-5736 or tlcran2@email.uky.edu.

The Physician Liaison Program works to improve service to providers who refer patients to UK HealthCare physicians, hospitals, and clinics. The team’s role is to facilitate communication between you – the referring provider – and our physicians and staff so you get the access and information you need.

If you have questions, or would like to schedule portal training, contact Tarra Crane at 859-257-5736 or tarra.crane@email.uky.edu.
Although cleft lip and palate are often seen as problems in developing nations, as seen in ads for Smile Train, the reality is that they occur in a steady rate among any population. In general in the United States, the incidence of cleft lip and palate is about 1 in every 700 live births. The causes of cleft lip and cleft palate are not really identified since much of it appears to be multifactorial with complex interactions between genetics and environment. There are associated risk factors including previous family members with cleft lip and/or palate, poor prenatal nutrition, use of alcohol, tobacco or illicit drugs during pregnancy, and maternal obesity.

Cleft lips and cleft palates can be found in many combinations. Lips can have a cleft in one or both sides or be incomplete either unilaterally or bilaterally. There are also subtler forms of cleft lips where there is still skin attached across the cleft (incomplete cleft) or a small notch at the lip (microform cleft), and even more subtle forms where the lip muscle has separated but the skin is still intact.

Cleft palates are also found in many varieties and can be found with or without a cleft lip. Complete clefts of the lip and palate, can be either unilaterally or bilaterally. There can also be a palate cleft that only involves the soft palate and not the roof of the mouth (secondary cleft palate), as well as a submucous cleft. A submucous cleft can be subtle and is essentially when the muscle of the soft palate is oriented properly and can be a problem for speech. A common “triad” associated with a submucous cleft is notching of the hard palate, split uvula and a zona pellucidum, which is a clear longitudinal line running midline down the soft palate.

Currently many of these clefts are found on a prenatal screening ultrasound. While this can be good in preventing surprises at birth, it can also yield a large amount of anxiety. Undergoing prenatal counseling is ideal to help the prospective parents plan for their child. During this consultation, addressing what to expect after birth, the time frame of the surgeries to correct the clefting, and what to expect postoperatively should be covered. Cleft care is a lifelong process, and the plastic surgeon should be both trained and dedicated to providing such longitudinal care.

Cleft care is also multidisciplinary, which helps address the multitude of issues that can arise. These issues are feeding, eating, speech, hearing and the psychological impact of a cleft lip. Team members should include a nutritionist; speech therapist; psychologist; social worker; dentist; ear, nose and throat physician; oral surgeon; and plastic surgeon. A full craniofacial team, such as the combined one between UK and the Kentucky Commission for Children with Special Health Care Needs, is ideal to provide comprehensive care cleft care. During a visit to the team, the parents are taught how to help the child feed appropriately as well as provided with detailed information about their child’s expected development and things to look for. Routine checkups allow us to help reinforce teaching as well as provide ongoing care.

Surgical treatment for a cleft lip is often initiated around 3 months for a full term child. The palate surgery is then done around 9 months to a year. These two surgeries are the biggest steps for the child and family. It is not uncommon to provide a “touch-up” surgery to help revise the lip or nose prior to kindergarten, where the child will become more socialized with his or her peers. Also during this time, speech development and mechanics are scrutinized to ensure the palate is functioning properly, and speech therapy and/or palatal revision are performed to optimize speech. When the child’s adult teeth begin to form, bone grafting is performed if there is a complete cleft through the gumline. Usually more refinements of the nose and lip can be done prior to high school. It is not uncommon to perform more jaw (orthognathic) surgery when skeletal development has matured, usually 16 or 17 years old for a male, and 14-16 for a female.

As mentioned before, cleft care is a lifelong pursuit, and fellowship training in cleft care provides a larger understanding of cleft pathology, which is vital in providing comprehensive cleft care. With a comprehensive cleft team and the resources available, it is expected that children with clefts will live healthy and productive lives.

To refer a patient, call UK•MDs at 1-800-888-5533.
Hands-on care: Nurses play key role in development of innovative new protocols

By Rebekah Tilley

During the past five years, there has been a dramatic increase in the number of infants treated at Kentucky Children’s Hospital suffering from neonatal abstinence syndrome (NAS) in which babies are born addicted to the same drugs their mothers were taking while pregnant. Babies begin feeling the effects of withdrawal the moment the umbilical cord is cut.

Kentucky Children’s Hospital handles many of the most acute cases in the central and southeastern regions of Kentucky with as many as two-thirds of its NAS population transferring from outside hospitals.

“Over the last year or so anywhere from 10 to 15 percent of our NICU (Neonatal Intensive Care Unit) patients have been here for neonatal abstinence syndrome,” says Lori Shook, MD, professor of pediatrics with the UK College of Medicine and a neonatologist with Kentucky Children’s Hospital. “And that’s their primary diagnosis, meaning that’s what they were admitted for.”

“We didn’t have a cohesive goal and babies were just here too long. And now, as we say in the horse world, we’re all pulling the same way in the harness.”

– Lori Shook, MD

As the population of NAS patients in the NICU increased, it became apparent that a formal protocol focusing on the unique needs of NAS babies needed to be developed.

“Everyone had their own opinion on how to take care of these babies,” Dr. Shook says.

With Dr. Shook in the lead, Kentucky Children’s Hospital approached the challenge with a unique multidisciplinary Neonatal Abstinence Task Force that sought to combine the best of chemical and developmental care to most effectively and comfortably wean NAS babies off their drug addictions.

Nurses key in protocol development

NICU Patient Care Manager Kathy Isaacs, MSN, BSN, RNC-NIC, believes that the opportunity to observe both the nursing and provider aspect of NAS patient care in action at Thomas Jefferson University Hospital in Philadelphia helped tremendously in developing a multidisciplinary protocol for the NAS patient population.

A group of NICU nurses and NAS Nurse Champions began working with Dr. Shook on applying the findings of the Neonatal Abstinence Task Force.

The nurses at the bedside are the first to identify and evaluate NAS babies using a quantitative scale which measures the severity of various symptoms. The score provides the basis for the baby’s chemical treatment.

Starting with a standard dose of 0.4mg/kg/day of morphine that is split over every feeding, NAS babies are scored every six hours and their morphine increased until their symptoms are lessened enough for them to be comfortable.

Using rapid cycle changes in protocol has allowed Dr. Shook and task force members to improve protocols for these infants, accelerating their ability to begin weaning them off their addiction.

Hands-on comfort

In addition to providing valuable feedback on protocol development, the NAS Nurse Champions of the NICU are uniquely positioned to advise and administer non-chemical soothing techniques to this patient population.

One of the first recommendations by the NAS Nurse Champions was to move the NAS infants, as soon as they were identified and their withdrawal symptoms under control, from the fast-paced, brightly lit nurseries on the fourth floor NICU to the less stimulating environment of the third floor NICU.

“We read more and more about massage therapies with small babies, and a number of the staff thought it might be a good thing for the (NAS) babies,” says Staff Nurse renee Broaddus, RNC-NIC, one of the Nurse Champions and a 40-year veteran in the NICU. “Sometimes anything that causes stimulation is just way too much. But we had evidence that this type of therapy would allow them to be calmer in their environment.”

In September 2011, a number of the NICU nurses, including some of those specializing in NAS infants, took part in Certified Infant Massage Instructor training, a proposal that was developed directly from the NAS protocol initiative.

Know your baby

Already the NICU nursing staff has been able to teach massage techniques to mothers and other family members to give often tentative, uncertain parents a way to soothe and provide comfort to their babies. As Isaacs describes, it is positive for the parents as well as fulfilling for the nursing staff.

Going forward

Dr. Shook undertook this project with a goal of a start-to-finish program of care for NAS infants, including working with their ultimate care providers to facilitate their going home. She is currently working on setting up a system where parents, foster parents or other caregivers come and live with the baby for a few days before going home. “We’re looking to make that possible hopefully by this spring,” Dr. Shook says.
Kentucky Children’s Hospital provides a resource for kids no other health care facility in the region can match. Because we know parents prefer not to travel with a sick child, we offer outreach clinics and affiliated locations to provide state-of-the-art pediatric care close to home.

For more information or to refer a patient to our subspecialty clinics, our hospital services or one of outreach locations, contact UK•MDs at 859-231-9922 or toll free 1-800-888-5533.

Kentucky Children’s Hospital is proud to serve the children of the Commonwealth and surrounding areas. As the only hospital in the eastern part of the state dedicated to caring for kids, Kentucky Children’s Hospital continues to lead the way in exceptional pediatric care by providing specialized medical and surgical services, from medical case management to life-saving procedures, including:

• The only Level III NICU in the eastern half of the state.
• The only facility in the state with a fully accredited echocardiography laboratory which is part of the full-service pediatric congenital heart program.
• The only pediatric-trained anesthesiologists.
• The region’s most comprehensive pediatric surgical services.
• The Makeen David Pediatric Emergency Center dedicated to pediatric emergency and trauma care.

If advanced specialty care is needed, we have experts in each of the following services:

• Adolescent medicine
• Allergy and immunology
• Cardiology
• Critical-care medicine
• Dentistry
• Development and behavioral medicine
• Emergency medicine
• Endocrinology
• Genetics and metabolism
• Gastroenterology and nutrition
• Hematology and oncology
• Infectious disease
• Neonatology
• Nephrology
• Neurology
• Ophthalmology
• Otolaryngology
• Psychiatry – child and adolescent
• Pulmonology
• Radiology
• Rheumatology and musculoskeletal disease
• Urology

The following specialty clinics are designed to meet unique health care needs:

• Congenital Heart Clinic
• Cystic Fibrosis Clinic
• Hemophilia Treatment Center
• High BMI Clinic
• International Adoption Clinic
• Long-Term Follow-Up Cancer Care Clinic
• Mommy and Me Breastfeeding Clinic
• Thomas H. Pinkstaff Medical Home
• Clinic for children with special health care needs
• Vascular Malformations Clinic

Our team of fellowship–trained pediatric surgeons provide expertise in general surgery as well as all subspecialty pediatric surgical services including:

• Cardiothoracic
• ECMO
• Kidney transplant
• Neurosurgery
• Obstetrics and Gynecology
• Ophthalmology
• Oral and maxillofacial
• Orthopaedics
• Otolaryngology
• Plastics
• Urology

Additionally, our team of four surgeons, which is one of the largest general and thoracic teams in the country, provides the following surgical specialty areas:

• Abdominal surgery
• Endoscopy
• Gastrointestinal problems
• Head and neck surgery
• Hernias
• Laparoscopic/minimally invasive surgery
• Newborn surgery
• Oncology
• Thoracic surgery
• Trauma surgery

Neonatal and pediatric emergency transport

Kentucky Kids Crew is a specialty team that provides inter-facility (hospital-to-hospital) critical-care transportation for both neonatal (newborn) and pediatric patients. We are the only transport team in the region exclusively dedicated to transporting newborns and children. Our team is directed by neonatologists and pediatric intensivists, and includes:

• Critical-care nurses trained in advanced procedures such as intubation, thoracostomy and umbilical line placement.
• Emergency medical technicians who drive the ambulances used for ground transport.
• A dedicated transport team on duty 24 hours a day, ready to be mobilized immediately when a referring facility calls.

Our goal is to be the premier transport service for children in Central and Eastern Kentucky. Additionally, we work to improve the pre-transport care of children in the region through outreach education and by strengthening ties with referring providers.

For inter-facility transfers, call UK•MDs at 859-231-9922 or toll free 1-800-888-5533.
Meet our new physicians

Kentucky Children’s Hospital is pleased to welcome a new pediatric hematologist/oncologist.

James Thomas Curry Badgett, MD, PhD

Dr. Badgett earned his medical degree from the University of Louisville and his doctorate in molecular biology from the UK. He completed his internship and residency in the Department of Pediatrics at the U of L and Kosair Children’s Hospital. Dr. Badgett comes to UK HealthCare from The Johns Hopkins Hospital and the National Cancer Institute where he has been a pediatric hematology/oncology fellow. His research at the National Cancer Institute has been focused on next generation sequencing of neuroblastoma and rhabdomyosarcoma tumor genomes.

Dr. Badgett is a member of the American Association for Cancer Research and the American Society of Pediatric Hematology and Oncology. In 2010 he was awarded the Scholar in Training Award by the American Association of Cancer Research, the Fellows Award for Research Excellence by the National Institutes of Health and Best Oral Presentation Award by Advances in Neuroblastoma Research in Stockholm, Sweden.

To refer a patient to Dr. Badgett or our pediatric hematology/oncology division, call UK-MDs at 859-231-9922 or 1-800-888-5533.

Keeping children safe

School’s out!

Children are spending more time outdoors playing and walking in their neighborhoods during the summer when school is out. This is a fun time for kids, but they can also be at a higher risk for injury during this season.

To make sure your kids stay safe this summer, Safe Kids recommends that children:

- Always cross the street with an adult until age 10.
- Cross the street at corners, using traffic signals and crosswalks.
- Look left, right and left again when crossing.
- Walk on sidewalks or paths.
- Walk facing traffic as far to the left as possible if there are no sidewalks.
- Never run out into the street or cross in between parked cars.
- Wear a properly fitting helmet every time they ride a bicycle or play wheeled sports.
- Are never left alone in vehicles.
- Play in safe areas, away from streets and vehicles.

Drive Safely this Summer – Reminders for motorists to be extra careful:

- Slow down and be especially alert in residential neighborhoods.
- Take extra time to look for kids at intersections, on medians and on curbs.
- Enter and exit driveways and alleys slowly and carefully.
- Watch for children on and near the road during daytime hours.
- Never leave a child alone in a vehicle.
- Always lock car doors and trunks and keep keys out of children’s reach.
- Remember that children may move in unpredictable ways.
- Reduce any distractions inside your car so you can concentrate on the road and your surroundings.

For more information, contact Safe Kids Fayette County at 859-323-1153 or visit our website www.safekidsfayettecounty.com or on Facebook.

Community Corner

Providers learned about child abuse concerns at the most recent Division of Pediatrics Morning Report. The session focused on a recent child abuse case. Child Protective Services (CPS) is now called the Department of Community Based Services (DCBS). Fayette County is in the Southern Bluegrass Region. The number to report a case is 859-246-2298 for Fayette County.

Plan to attend our next Morning Report on Wednesday, September 19.
Outreach Corner

The Congenital Heart Center at KCH is in the process of expanding telemedicine service in the state to allow better access to cardiac specialties. With one of the most extensive networks in the country, UK Healthcare and KCH can offer services in patients’ home communities to minimize the stress of traveling to Lexington. With our capabilities, our world-class multidisciplinary team of cardiologists, surgeons, intensivists, nurses and technicians is behind you to provide the highest level of care possible. With collaborative decision making, we will evaluate and determine the immediate next step of care as well as provide continued recommendations.

We also can provide ongoing congenital heart education through this developing network. Interactive video consultations allow us to diagnose and develop treatment plans in EP, interventional cardiology, cardiothoracic surgery, adult congenital heart, non-invasive diagnostics and fetal consultations. Benefits to our patients include better access to cardiac specialty and subspecialty services, improved quality outcomes and reduced travel costs. With telemedicine, we are partnering with community hospitals to allow better access to the multidisciplinary team and bring collaborative, higher-end cardiac services to the community.

If you would like more information or to find out how a hospital can partner with us, please contact Scottie Day, MD, FAAP, at 859-323-3984 or Scottie.Day@uky.edu, or Jason Grabham, RDCS, FASE at 859-257-9117 or jwgrab2@uky.edu.