Pediatric Nephrology Revitalization and Program Expansion

With the goal of revitalizing pediatric nephrology services and continuing to serve as a regional provider in this specialty area, Children’s Hospital of Richmond at VCU (CHoR) hired two new nephrologists, a nurse practitioner and several specialized ancillary staff members earlier this year, and has plans in place for a third new nephrologist to start in December. This new team provides comprehensive programming that addresses the full spectrum of patient needs and supports a planned program expansion to increase access to these services in Central Virginia.

From diagnosis to long-term treatment, the full range of medical and support services for kidney and urinary tract disorders are now available at CHoR. “We can take care of all aspects of renal disease, dialysis, biopsies and transplantation within our division,” Timothy Bunchman, MD, Professor and Chief, Division of Pediatric Nephrology, remarks. “This allows for longitudinal care that is never disrupted so the family and child know the team — and are part of the team — throughout the entire renal journey.”

Revitalization, progress and growth

Initial revitalization efforts focused on re-beginning programs for inpatient and outpatient care, acute and chronic dialysis, and pediatric renal transplantation. New team members began serving patients in February 2011 and less than four months later a 13-year-old from Halifax, Va., underwent a kidney transplantation, the first pediatric procedure of this type completed in the region in the past four years. Long-term plans include establishing outpatient clinics across Central Virginia and starting a pediatric nephrology fellowship program by 2013.

Additionally, with the new larger team there is increased appointment availability, which is also an area of focus for program growth. “As of today we offer same-day or next-day service to referring physicians on-site at the MCV Campus,” Dr. Bunchman comments. “In the future we plan to offer that same urgent-care service at multiple sites.”

Comprehensive care

While pediatric nephrology services are not new to CHoR, the comprehensive nature and depth of the current team is. Ancillary team members include a dietitian, nurse educator and social worker which allows for a multidisciplinary treatment approach that Dr. Bunchman considers critical for optimal care: “Many children with kidney diseases have poor appetites and growth, and that is where the dietitian fits in. Often families of a child with kidney disease require education in the care of their child, and that is where the nurse educator fits in. A child may also have school or community support needs, and that is where the social worker fits in.”

The pediatric nephrology division also works cooperatively with CHoR’s urology team for urologic renal diseases and cardiology team for hypertension related to renal issues and with maternal-fetal medicine for fetal renal abnormalities. Likewise, the nephrology team is available to provide supportive care for other divisions, including cardiothoracic surgery, hematology/oncology, and pediatric and neonatal intensive care.

Partnership promise

CHoR is the only provider of pediatric nephrology services in Central Virginia. The revitalized pediatric nephrology program is one of several advances in care made possible by the joining of Children’s Hospital and VCU Children’s Medical Center in 2010 to create the region’s first full-service children’s hospital. Children’s Hospital Foundation, which supports the unified CHoR organization, provided funding for revitalization and expansion.
Children’s Hospital of Richmond at VCU (CHoR) is dedicated to recruiting and retaining nationally recognized clinicians, outstanding educators and innovative researchers. The hiring of 30 new physician faculty within CHoR’s first few years is an organizational goal for advancing the level of pediatric services in our region and increasing access to specialty pediatric care for children in Central Virginia. Thirteen new physicians have been hired since Children’s Hospital and VCU Children’s Medical Center joined operations in July 2010 to create CHoR. The following have joined our staff since August 2011:

**Alison K. Chapman, MD**  
Assistant Professor of Pediatrics  
Division of Neonatal Medicine  
Medical Degree: Vanderbilt University School of Medicine, Nashville, Tenn.  
Residency: Duke University Medical Center, Durham, NC  
Fellowship: Johns Hopkins Hospital, Baltimore, MD  
Office email: achapman@mcvh-vcu.edu  
Office phone: 804-828-9965  
NICU: 804-828-9956  
Practice location: Critical Care Hospital, 6th floor  
Membership: American Academy of Pediatrics  
Professional interests: Delivery room resuscitation skills; resident education  
Board Certified in Pediatrics  
Board Eligible in Neonatology

**Elena K. Kwon, MD**  
Assistant Professor of Pediatrics  
Division of Pediatric Cardiology  
Medical Degree: American University of the Caribbean School of Medicine, St. Maarten, Netherlands Antilles  
Residency: SUNY Upstate University Hospital, Syracuse, NY; SUNY Stony Brook University Medical Center, Stony Brook, NY  
Fellowship: Cardiology - Children’s Hospital of Wisconsin, Milwaukee, WIs  
Fellowship: Advanced Imaging - Mount Sinai Medical Center, New York, NY  
Office email: ekwon@mcvh-vcu.edu  
Office phone: 804-628-HRTS (4787)  
Consults: 804-628-HRTS (4787)  
Practice locations: MCV Campus - Children’s Pavilion  
Additional satellite facilities  
Membership: American College of Cardiology; American Medical Association; American Society of Echocardiography; Society for Cardiovascular Magnetic Resonance  
Professional interests: Fetal cardiology; echocardiography; cardiac MRI  
Research interests: Fetal echocardiography; cardiac MRI  
Board Certified in Pediatrics  
Board Eligible in Pediatric Cardiology

**Clifton C. Lee, MD**  
Associate Professor of Pediatrics  
Chief, Division of Hospital Medicine  
Medical Degree: VCU School of Medicine, Richmond, VA  
Residency: VCU Medical Center, Richmond, VA  
Office email: clee3@mcvh-vcu.edu  
Office phone: 804-827-1186  
Hospitalist on-call: 804-828-0951  
Practice location: MCV Campus - Main Hospital, 7th floor  
Membership: American Academy of Pediatrics; Society of Hospital Medicine; American Medical Association  
Professional interests: Evidence-based medicine; transition of care; medical student and resident education  
Research interest: Hospital-based practice improvement  
Board Certified in Pediatrics

**Megan M. Lo, MD**  
Assistant Professor of Pediatrics  
Division of Pediatric Nephrology  
Medical Degree: University of Massachusetts, Amherst, Mass.  
Residency: Maine Medical Center, Portland, Maine  
Fellowship: Cincinnati Children’s Hospital, Cincinnati, Ohio  
Office email: mlo@mcvh-vcu.edu  
Office phone: 804-827-2264  
Appointments: 804-628-7337 x6  
Practice location: MCV Campus - Nelson Clinic, 1st floor  
Membership: American Academy of Pediatrics; American Society of Nephrology; American Society of Pediatric Nephrology  
Professional interest: Nephrotic syndrome  
Research interests: Effects of cardiovascular risk in pediatric kidney disease and vitamin D in kidney disease  
Board Certified in Pediatrics  
Board Eligible in Pediatric Nephrology

**Larissa M. Saldana, MD**  
Assistant Professor of Pediatrics  
Division of General Pediatrics  
Medical Degree: Medical University of South Carolina, Charleston, SC  
Residency: VCU Medical Center, Richmond, VA  
Office email: lsaldana@mcvh-vcu.edu  
Newborn Nursery: 804-828-6526  
Practice location: MCV Campus - Nursery  
Membership: American Academy of Pediatrics  
Professional interests: Lactation, newborn care; summer safety and injury prevention  
Board Certified in Pediatrics

To learn more about CHoR’s services, contact CHoR’s community liaisons:

**Cyndi R. Cline**  
804-228-5835  
ccline@chva.org

**Sherry W. Black, MBA**  
804-228-5971  
sblack@chva.org

CHoR’s community liaisons can provide answers to pediatric subspecialty service questions, assistance with referrals, expedited appointment scheduling, educational (CME) and instructional luncheons, facility tours, and copies of resources and publications.
Virginia Congenital Cardiac Consortium (VCCC)

The University of Virginia (UVA) Health System and Virginia Commonwealth University (VCU) Medical Center formed a Pediatric Surgery Congenital Heart Collaborative in 2010 to provide coordinated pediatric and adult congenital cardiac surgical care for patients in Charlottesville, Richmond and beyond. Now officially renamed the Virginia Congenital Cardiac Consortium (VCCC), this clinical alliance provides treatment, educational and research services that enhance patient access to specialized surgical treatments through coordinated patient care.

Program history
Virginia has a relatively small population with congenital heart disease and the vision of the VCCC collaboration was to provide excellent and sustainable cardiovascular surgical services in Virginia by joining distinguished programs into a larger entity. Collaboration began in late 2005 when the Pediatric Cardiovascular Surgery Program at UVA Health System’s Children’s Hospital and the Division of Pediatric Cardiology at VCU Children’s Medical Center (now Children’s Hospital of Richmond at VCU [CHoR]) began coordinating patient-care efforts and UVA-based surgeons began traveling to Richmond to perform select congenital heart surgeries at VCU Medical Center.

James Gangemi, MD, pediatric thoracic and cardiothoracic surgeon and assistant professor in the UVA department of surgery, is the surgical medical director for the Consortium. He provides surgical care at both UVA and VCU, depending on the patient’s needs, and sees patients for congenital heart surgical care consultation appointments at both locations. The Consortium also benefits from pediatric interventional cardiac catheterization laboratories and trained personnel and resources in pediatric anesthesia, critical care and nursing at both locations.

“We have a history of collaborating across the Commonwealth and have developed a dedicated team that allows us to provide outstanding care to children having heart surgery on a wide variety of congenital heart defects,” Dr. Gangemi remarks.

Care advances in fetal imaging
The routine use of ultrasound during pregnancy allows medical professionals to identify many heart defects prior to birth and in August 2011 Elena Kwon, MD, a pediatric cardiologist with special expertise in fetal imaging (see profile on page 2), joined CHoR’s medical staff to advance care in this area. Early diagnosis may allow in utero cardiac interventions, which can lead to a better outcome, and early detection enables the family and medical team to take necessary precautions, plan for delivery, and develop an optimal cardiac care plan. The advancement of fetal imaging services at CHoR, coupled with enhanced access to congenital cardiac surgical care made possible by the VCCC, increases the likelihood of diagnosis, detection and critical intervention as early as possible.

The alliance model
The alliance model is utilized across the United States and enables established congenital heart surgery programs to organize a network of care throughout their region or state. These partnerships centralize quality assurance parameters which are established in the collaborative network or the primary facility. Similar programs in California, Florida, South Carolina and other states have shown over the long term that multi-center surgical programs can increase capacity and surgical volume while maintaining quality of surgical outcomes. This type of collaboration results in improved patient satisfaction through more convenient regional care.

According to leadership at both VCU and UVA, the collaborative program will also enhance the ability to attract and retain high quality health care providers and translational research efforts. “We are excited about this agreement because it provides a formal framework for VCU and UVA to collaborate our shared goal to provide outstanding pediatric congenital heart surgical care to children and families,” John Duval, CEO of MCV Hospitals, VCU Health System, said of the joint effort.

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Services provided
CHoR’s pediatric cardiology team includes pediatric cardiologists (general, interventional, exercise and adult congenital experts) and fetal imaging experts who work in concert with the VCCC cardiothoracic surgeon; neonatal, maternal-fetal and critical care medicine; anesthesiology; nursing; and an array of additional pediatric medical specialties to provide in-depth clinical evaluation, diagnostic testing, surgery and ongoing treatment for the fetus, child and adult with:

- Aortic stenosis
- Atrial septal defects (ASD)
- Atrioventricular canal defects (AV Canal)
- Cardiomyopathies
- Coarctation of the aorta
- Coronary anomalies
- Ebstein’s anomaly of the tricuspid valve
- Hypoplastic left heart syndrome (HLHS)
- Mitral valve regurgitation or stenosis
- Partial anomalous pulmonary venous return (PAPVR)
- Patent ductus arteriosus (PDA)
- Pulmonary stenosis
- Single ventricle anomalies
- Tetralogy of Fallot (TOF)
- Total anomalous pulmonary venous return (TAPVR)
- Transposition of the great arteries (TGA)
- Truncus arteriosus
- Vascular rings
- Ventricular septal defects (VSD)

Fast facts
- The VCCC’s patient outcomes are superior to national benchmarks provided though the Society of Thoracic Surgeons Database and adjusted for complexity.
- To date, 150 surgical cases have been performed in Richmond under the umbrella of the VCCC.
- Congenital heart disease is one of the most common birth defects worldwide, occurring in about 1 in 100 live births, and each year in Virginia approximately 800 babies are born with a congenital heart defect. Nearly 400 of these infants require medical intervention that may include open-heart surgery soon after birth.
One Phone Number for Admissions, Transfers, Transports & Consults

NEW!

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<thead>
<tr>
<th>Extension</th>
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<tr>
<td>x1 TRANSFER CENTER (for admissions, transfers, transports)</td>
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This extension connects to CHoR’s Transfer Center which operates 24/7 and is staffed by communication specialists who quickly facilitate urgent and same-day admissions. The Transfer Center coordinates inpatient-to-inpatient and emergency department-to-emergency department transfers for pediatric patients. The center’s communication specialists gather medical information, page the appropriate physician, and remain on the line until the patient is accepted for transfer or a medical decision is made for the child. They also coordinate bed assignments and VCU LifeEvac for air transport as needed; share inbound patient data with air transport and the CHoR Emergency Department; and provide updates about the transfer, transport and LifeEvac status to the referring physician and facility.

| x2 PHYSICIAN CONSULTS |
This extension is staffed by communication specialists who page the appropriate CHoR physicians and specialists and stay on the line until the caller is connected with a CHoR team member for consultation.

| x3 PEDIATRIC EMERGENCY ROOM |
This extension connects directly to CHoR’s emergency room for emergency information and urgent Child Protection Center needs.

To make the referral and acceptance process faster, more efficient and more convenient, CHoR now offers a single-call service for rapid consultation with our physicians and a streamlined process for admission, transfer and transport. Health care professionals can access this service by calling the number listed above and connecting with the appropriate service.

Did You Know...

- CHoR is a full-service children’s hospital within the VCU Medical Center, the only designated Level 1 Trauma Center in the region. The pediatric trauma team at CHoR is equipped to work diligently within the “golden hour” to give children the chance to survive and thrive after traumatic injuries. CHoR also has the region’s only Level 1 Pediatric Intensive Care Unit (PICU).

- CHoR’s emergency room, PICU, Pediatric Progressive Care Unit (PPCU), Acute Care Units and Neonatal Intensive Care Unit (NICU) all have access to the region’s most comprehensive and robust array of pediatric subspecialties to help provide the best possible outcome and experience for children and their families. CHoR’s new pediatric emergency room (opened December 2010) provides a state-of-the-art, child-friendly atmosphere and has its own pediatric entrance, waiting area, private rooms and pediatric radiology suite.