



VIRGINIA • PEDIATRICS

American Academy of Pediatrics • Virginia Chapter

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American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™
Virginia Chapter

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Advocacy Flash

MAY 7, 2015: SCHOOL MEALS COMMUNITY ELIGIBILITY
| FREE BREAKFAST AND LUNCH FOR ALL STUDENTS |



Overview

Included in the Healthy, Hunger-Free Kids Act of 2010, the community eligibility provision streamlined the process for schools with high percentages of low-income children to provide free breakfast and lunch to all students.

Individual schools with 40% or more identified students can participate in community eligibility. Districts can also group schools in any configuration and calculate the free rate percentage for the group as a whole, using their combined enrollment and total number of identified students, as long as the percentage is 40% or higher. Within the same school district, some schools can participate individually and some can participate as a group. All schools in the district can participate as a single group with the same free rate claiming percentage as long as it is 40% or higher. Participating schools are guaranteed to receive the same reimbursement rate—or higher if the identified student percentage increases—for 4 school years.

Through the community eligibility provision, schools no longer need to apply via paper application for the program. Instead, they are reimbursed by a formula that calculates the number of students who are certified without application for free school meals—namely children in foster care, Head Start, children who are homeless or whose families are migrants, children living in households that receive support from the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF) cash assistance, Food Distribution Program on Indian Reservations (FDPIR) benefits, or Medicaid (in districts participating in a USDA demonstration project).

Program Benefits

- More children receive meals they may not otherwise have. During the 2014-2015 school year, more than 6 million children in participating schools have access to 2 healthy meals at school each day.
- When all children receive free meals, associated stigma is significantly lessened or eliminated.
- Schools don't have to collect fees, follow-up on unpaid fees, or count each meal served by fee category, making the program easier to implement and boosting participation.
- Increased participation allows school districts to take advantage of economies of scale and reinvest additional revenue in meal quality improvement.

State Roll Out

Community eligibility has been implemented in a number of states each year following enactment of the Healthy, Hunger-Free Kids Act.

- 2011-2012 school year | Illinois, Kentucky, Michigan
- 2012-2013 school year | New York, Ohio, Washington, DC, West Virginia
- 2013-2014 school year | Georgia, Florida, Maryland, Massachusetts

The 2014-2015 school year was the first that all schools in all states that meet the 40% identified student threshold were able to participate in the program.

Once states complete the student identification process, they must publish a list of eligible and near eligible schools and school districts for the 2015-2016 school year by May 1, 2015. To participate for the 2015-2016 school year, school districts must notify their state agency by August 31, 2015.

Participating schools are guaranteed to receive the same reimbursement rate—or higher if the identified student percentage increases—for 4 school years.

Members are encouraged to reach out to schools and districts in their communities—especially those with high poverty populations who are not participating and offer support and assistance.

The Virginia Chapter would like to connect with superintendents, school boards, and school and district nutrition and meal program directors to discuss and promote the value of this program and to offer support and assistance.

President's • MESSAGE

Barbara L. Kahler, MD, FAAP | *President Virginia Chapter | American Academy of Pediatrics*



As we all finally welcome spring, there are many things to share from the AAP, both National and State:

1. The Annual Leadership Forum was held in Chicago in March and the Top 10 Resolutions have been released. The Executive Committee were all there, please free to contact us with any questions you may have.

Top 10	Res #	District	Title
1	12SA	IX	Addressing the Legal and Mental Health Needs of Undocumented Immigrant Children
2	108	IX	AAP Terminate Sponsorship(s) on HealthyChildren.org of Companies that Produce Soft Drinks and Sugar-sweetened Beverages
3	54	III	Use of Telehealth to Extend the Pediatric Medical Home
4	63SB	III	Screening and Toolkit for Poverty
5	29SA	VII	Marijuana Manufacturer Responsibility in Limiting Exposure to Individuals Under Age 21
6	109	VII	Sugar-sweetened Beverage Company Sponsorship of the AAP
7	62.64SB	IX	Universal Screening for Hunger/Food Insecurity During Office Visits
8	10	X	Eliminating Triple-digit Payday and Car Title Loans
9	28SA	VII	Prevent Marijuana Exposure for Children
10	93	VI	Executive Director Lodging Expenses at District Meetings

2. There has been some discussion about the electronic Redbook and it's availability to non-AAP members in your office. There is now available a site license for a fee based on the size of the group, contact Sashaya Davis sdavis@aap.org for more information.

3. District IV has been selected to be a pilot for a grant through the CDC to expand HPV vaccine rates. We have the lowest completion rates in the country and the CDC would like to improve that. District officers and QI delegates will be meeting in June to be trained for rolling out the grant. There will be more information coming out to members once we get back so pay attention to the Chapter communications.



4. We have applied to the Healthy People 2020 for a grant to explore how best to include telemedicine in private practice. We should be hearing soon about the grants and whether ours has been accepted.

5. We are in the preliminary stages of working with Anthem on several projects including telemedicine and performance based payments. More information to come as we move forward

Please know that those of us that are on the Board welcome your thoughts and / or questions on these issues or any others you may have.

Please contact Jane Chappell, our Executive Director, Jane Chappell at jchappell@ramdocs.org



Joining the Virginia Chapter, AAP Board during their March Retreat were Benard Dreyer, MD, AAP President-elect, (Barbara Kahler, MD, VA-AAP President), Jane Foy, MD, AAP District IV Chairperson and Karen Remley, MD, Chief Medical Director, Anthem BCBS Virginia (also incoming AAP Executive Director). With their guidance the Virginia Chapter was able to develop a strong Strategic Plan for 2015.



Dates to Remember ...



2015 Pediatric Conferences

9th Annual Pediatric and Adolescent Sports Medicine Update for Primary Care

June 18, 2015 | 8:00 a.m. - 4:00 p.m.

Brickhouse Auditorium | Children's Hospital of The King's Daughters

Topics at this conference will include:

- What Made Your Athlete Collapse?
- Spine Problems in Young Athletes
- What a Pain: Groin Problems in Young Athletes
- Youth Football: To hit or not to hit
- MMA and Kids: Pro vs. Con
- Sports Specialization in Kids
- Panel Discussion: Youth Sports Medicine Dilemmas

Workshops:

- Osteochondrosis and Young Athletes
- An Introduction to Dynamic Neuromuscular Stimulation (DNS)
- Delayed Onset Muscle Soreness
- Office Based Evaluation & Management of Concussions
- Active Release Therapy (ART) for Athletes

You may view/download the brochure as well as register online by clicking on www.chkd.org/cme.

2015 Peds at the Beach Conference

July 17-19, 2015 in Virginia Beach, VA.

The planning committee is pleased to announce that:

- Dr. Harold Mauer former Chancellor of the University of Nebraska Medical Center, former Chair of Pediatrics at VCU-MCV for 17 years and world renown pediatric oncologist will present Hematologic Office Emergencies and he will be honored on July 18, 2015.
- Dr. Gita Massey will present a workshop on Office Management of Common Hematologic Problems.
- Dr. Aline Baghdassarian will return to present a hands on workshop on Office Stabilization of the Critically Ill Child.
- Dr. John (Jack) Pellock will present The Child with Altered Mental Status.

Contact Carole Hettema 804-828-5416 <http://www.vcuhealth.org/cme> for more information.

The Donald W. Lewis Pediatric Update 2015

September 18 -20

Williamsburg Lodge | Williamsburg, Virginia

Sick Kids in the Pediatric Office: Is hospitalization necessary?

Topics will include PCP-Hospitalist communication, RSV, Newborn fever, community-acquired pneumonia, urinary tract infections, asthma and infant jaundice - with a specific emphasis on those clinical indicators that may need more aggressive measures only available in a hospital.

Health Care Reform: Must-know Issues for pediatricians

Topics will include Virginia Medicaid and CHIP programs, the practical evolution of the Affordable Care Act (ObamaCare) and how high-deductible health plans may affect pediatric practices.

Pediatric ENT Update: Diagnosis and management of Common ENT problems in children

Topics include review of surgical indications for common problems such as acute otitis media and sleep disorders, algorithms for diagnosis of various head and neck masses, diagnosis and treatment of congenital hearing loss and options for treatment of common ear deformities including neonatal ear-molding and surgical reconstruction.

For additional details, contact Rosalind Jenkins at (757) 668-8942 or Rosalind.Jenkins@chkd.org.



Present

VIRGINIA•PEDIATRICS NEWSLETTER

American Academy of Pediatrics – Virginia Chapter

Continuing Medical Education

This activity has been planned and implemented in accordance with the Essential Areas and policies of Medical Society of Virginia through the joint sponsorship of Children's Hospital of The King's Daughters and the American Academy of Pediatrics – Virginia Chapter.

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Jamil Khan, MD, Windy Mason-Leslie, MD, Amy Perkins, Amy Sampson

How to Obtain Credit:

Review the articles on pages 5-10. Complete the VA-AAP Newsletter Registration and Evaluation Form on page 11 and return to the Children's Hospital of The King's Daughters, CME Office, 601 Children's Lane, Norfolk, VA 23507, or 757-668-7122. You may also visit <https://www.surveymonkey.com/s/VAAAPSpring2015> and complete online. Please allow up to 8 weeks to receive your certificate.

Disclosure of Significant Relationships with Relevant Commercial Companies/Organizations

The Children's Hospital of The King's Daughters endorses the Standards for Commercial Support of Continuing Medical Education of the Medical Society of Virginia and the Accreditation Council for Continuing Medical Education that the providers of continuing medical education activities and the speakers at these activities disclose significant relationships with commercial companies whose products or services are discussed in educational presentations. A commercial interest is defined as an entity producing, marketing, re-selling, or distributing health care goods or services consumed by or used on patients.

For providers, significant relationships include large research grants, institutional agreements for joint initiatives, substantial gifts or other relationships that benefit the institution. For speakers, significant relationships include receiving from a commercial company research grants, consultancies honoraria and travel, other benefits, or having a self-managed equity interest in a company.

Disclosures:

The following faculty have disclosed that they do not have an affiliation with any organization that may or may not have an interest in the subject matter of this CME activity and/or will not discuss off-label uses of any FDA approved pharmaceutical products or medical devices.

Kemberly P. Dunsmore, MD
Ann L. Kellams, MD

Thomas J. L'Ecuyer, MD
Robert A. Sinkin, MD, MPH

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The following faculty have disclosed that they have an affiliation with an organization that may or may not have an interest in the subject matter of this CME activity and/or will discuss off-label uses of FDA approved pharmaceutical products or medical devices.

None.

The Neuro-NICU at the University of Virginia

Robert A Sinkin, MD MPH

Charles Fuller Professor of Neonatology;

Division Head Neonatology

Objective: Reader will be able to describe the Neurocritical care service at UVA.

ACGME Competencies: Patient Care, Interpersonal Communication Skills and Systems-based Practice



The Neonatal Intensive Care Service (NICS) at the University of Virginia which is comprised of the Division of Neonatology within the Department of Pediatrics and the entire clinical enterprise of

the NICU within the UVA Health System strives ***“To improve measureable outcomes for sick and at-risk neonates through the integration of state-of-the-art medical and informational technologies, evidence-based therapies, translational research protocols and compassionate care in an environment that is family-centered and developmentally organized.”*** The NICS demonstrates the highest level of expertise and ability in the medical and nursing care of sick and premature newborns. The accomplishments of the NICS are substantiated by meeting and exceeding many national metrics (including CABS rates, neonatal mortality) and recognition as a Top 50 Neonatology program by *U.S. News and World Report’s* “Best Children’s Hospitals” rankings. The UVA Neonatal Intensive Care Service provides care to infants and families from the local Charlottesville and Albemarle community, Central and Western Virginia and from throughout the state. Infants with rare conditions also come to the UVA NICS from neighboring states. The Level IV Neonatal Intensive Care Unit (NICU), where the majority of these services are provided, is the only quaternary NICU serving central and southwestern Virginia.

As part of its ongoing commitment to patient care, community health, educational and research activities of the University of Virginia Health System, the NICS has identified several opportunities to further and sustain the services required by our region, state and

university, including the continual development of the services, facilities, and staff of the NICS. To this end, we are deploying personnel and mounting greater expertise within the field of neonatal neurosciences. We are developing a **Center of Excellence** to establish a center for the care of newborns with neurologically-based disease states. By partnering with pediatric neurology, neurosurgery and developmental pediatrics along with neurology-focused basic science researchers, we have developed a **neurocritical care service** within the NICU staffed by nurses with additional neurological competencies and supported by specialized equipment (with the desire to purchase an MRI compatible infant incubator). We are recruiting a Neurointensivist physician to lead the neurocritical care team across the NICU, PICU and intermediate care unit, and we have designated a neurocritical nurse coordinator to coordinate multidisciplinary patient care team, advance applicable clinical research, and initiate appropriate post-discharge follow-up. Through this integration of services into a Center of Excellence we aim for and expect to see improved patient outcomes and to attract families from throughout the state.

“The **Neuro-NICU** at the University of Virginia provides high-level specialized care for infants at risk of brain injury. We treat infants with conditions such as hypoxic ischemic encephalopathy, seizures, stroke, intraventricular hemorrhage, hydrocephalus and other brain malformations using a collaborative multidisciplinary approach. Our comprehensive team of specialists from neonatology, pediatric neurology, pediatric neurosurgery, neuroradiology and developmental pediatrics work together to provide the highest level of care for infants at risk of neurological injury,” said Dr. Santana Zanelli.

The Neuro-NICU Team is multidisciplinary and includes neonatology, pediatric neurology, developmental pediatrics, neurosurgery, PT/OT, and neuroradiology. The team coordinators are: Lisa Letzkus (Developmental Pediatrics); Santana Zanelli (Neonatology), Jen-



From left to right: Lisa Letzkus, Santana Zanelli, Jennifer Burnsed, and Kristen Heinan. Not pictured: Sarah Roberts

nifer Burnsed (Neonatology); Kristen Heinan (Pediatric Neurology); and Sarah Roberts (Neurosurgery).

The team’s goal is to deliver excellent clinical care to our infants with acquired brain injury and complex neurologic problems. This will include multidisciplinary recommendations for infant’s inpatient care from neurology and developmental pediatrics, continuity of care prior to discharge with providers that will be caring for the infant in clinic long-term, and education for providers and families. There are Neuro-NICU Rounds, Bi-weekly Neuroradiology Rounds, and Quarterly Neuro-NICU Education Sessions:

- Weekly Neuro-NICU Rounds – Rounds at bedside of included infants Fridays at 3PM with the Neuro-NICU team. A summary of recommendations and discussion from these rounds will be available in a plan of care note in the electronic health record.
- Bi-weekly Neuroradiology Rounds – Review of MRIs with Dr. Julie Matsumoto (neuroradiology) and neurology. On-service team will be notified of patients being discussed in each session so that they may attend. Occur in Moss Auditorium 1st and 3rd Tues days of month at 11AM.
- Quarterly Neuro-NICU Education Session – Multidisciplinary discussion of an interesting case and topic with education geared towards LIPs. The first session was held on February 3, 2015. Sarah Roberts, NP (Pediatric Neurosurgery) presented an outstanding session on “Congenital Hydrocephalus”.

Questions or Suggestions? Please contact either Jen Burnsed (jcw5b@virginia.edu) or Santana Zanelli (sz5d@virginia.edu).

The UVA Breastfeeding Medicine Program— Supporting a Mother's Choice—Guilt-Free

Ann Kellams, MD

Associate Professor of Clinical Pediatrics

University of Virginia

Co-Chairman of the VA-AAP Breastfeeding Committee

Objective: Reader will be able to describe AAP, CDC, and Joint Commission infant care and breastfeeding recommendations. Discuss evidence-based tools available to help clinicians determine when medical supplementation of the breastfeeding infant is appropriate.

ACGME Competencies: Patient Care, Practice-based Learning and Improvement and Interpersonal Communications Skills.

Three years ago, UVA Women's Health and Children's Hospital combined resources with the Departments of Pediatrics, Obstetrics and Gynecology and Family Medicine to form the UVA Breastfeeding Medicine program. The program provides inpatient and outpatient consultations throughout the health system that combine a lactation consultant with a general pediatrician and the services are covered by insurance. Mothers on the postpartum unit and NICU are seen based on risk factors and on request; and elsewhere in the hospital, mothers or babies on other units with breastfeeding issues are evaluated and managed. We have a clinic space in the new UVA Children's Hospital Battle Building where mothers and infants are seen for consulta-

but is it necessary to go to such lengths to encourage a natural practice? We think so.

Human milk is species-specific and more than just nutrition for human babies. Each mother's milk is different and contains protection for babies against pathogens and potential threats in the shared environment. Many studies show advantages for babies who receive human milk over babies that do not, and most often, the longer the duration and the more exclusively they are fed mother's milk, the better. Babies who receive human milk have a lower risk of Sudden Infant Death Syndrome, infections, hospitalizations, and they have measurably higher IQ's, even when

contain cost, and help prevent major morbidity and mortality.

On an individual basis, it is true that one cannot tell who was breastfed and who was not when you see someone walk down the street. Rather, breastfeeding is a public health issue. Helping one baby and mother will require policy and practice changes for many, but so too for many other initiatives that pediatricians support such as vaccines, car seats, helmets, and sunscreen. Pediatricians spend a large portion of their time serving as not only clinicians and scientists, but also as public health ambassadors and patient advocates in their daily practices. The AAP recommends that all infants receive human milk exclusively until about six months, and then for at least a year combined with other foods. They go so far as to say that this is no longer a lifestyle choice, but a health decision that should be informed with the latest information (AAP Policy Statement Breastfeeding and the Use of Human Milk 2012). The Surgeon General issued a Call to Action to support and promote breastfeeding and the CDC and The Joint Commission both measure how closely hospitals adhere to the recommended, science-based best practices to ensure feeding gets off to a good start. Immediate skin-skin contact after birth, feeding within the first hour, as well as 24 hour rooming-in affect breastfeeding outcomes long after the hospital. There are excellent, trusted resources for determining excessive weight loss (NEWT study) and protocols to decide, based on evidence, when a breastfed baby needs something in addition to their mother's milk for medical reasons (Academy of Breastfeeding Medicine Clinical Protocol #3 Hospital Guidelines for the Use of Supplementary Feedings in the Healthy Term Breastfed Neonate, rev. 2009.)

In the 70's and 80's, we had very low rates of breastfeeding in the U.S. when as little as



tions for issues such as soreness, difficult latch, feeding problems, prematurity, infections, concerns for low supply, medical issues with mom or baby, going back to work, and tongue-tie. We are proud of our program,

controlling for likely confounders. In the developing world, the protection is life-saving, and in the NICU, the lower rates of necrotizing enterocolitis and sepsis in babies who are on human milk-only diets save hospital days,

... (cont.) The UVA Breastfeeding Program

1 in 5 mothers even “tried” it. Many adults may not have been breastfed themselves and have “turned out fine” (they will tell you this, but using the car seat analogy, that may be in spite of certain practices, not because of them). We, like the general population, have heard or seen all the horror stories: extreme weight loss, severe nipple damage, dehydration, etc., though in reality, appropriately timed maternal education, thorough feeding evaluations before problems arise, careful follow-ups, and evidence-based lactation support and interventions can go a long way to prevent all of those issues. Many of us were simply not taught that how babies feed matters, and why, or how to manage common breastfeeding problems. In fact, many of us had the opposite—formula company representatives giving our noon conferences with lunch provided and free textbooks, calculators, pens, and notepads, all of which are now frowned upon due to stricter policies on conflict of interest.

More than two-thirds of mothers have breastfeeding as their plan at the time of delivery. This is a good place to start, and no one would disagree with helping those mothers achieve their goals. In the U.S., sadly only 14% go on to exclusively breastfeed out to 6 months (CDC Breastfeeding Report Card 2014), and greater than 60% do not reach their personal feeding goals (Infant Feeding Practices Study II—Perrine, Pediatrics 2012). As advocates for our patients and their families, it is not our job or our place to *tell* mothers how to feed their babies, but we do have a responsibility to ensure that whatever health choices they are making are well-informed choices, and also to support those choices with evidence-based strategies. Often when you ask a mother about why she is not choosing to breastfeed, there are answers such as “I can’t because I am going back to work in 6 weeks,” or “I am afraid of the pain,” or “it didn’t work for me last time.” Exploring these issues a bit further may lead to opportunities for education or specialized assistance or support. Using motivational interviewing techniques, it may be possible to help the mother provide colostrum, or offer more breastmilk than formula, or consider

pumping her milk, for example. As with other health-related behaviors, there is a fine line between informing and controlling, but pediatricians are masters of this dance that some call the “art” of medicine.

Giving advice to breastfeed is irresponsible, though, unless we are also providing education, support and the optimal environments for success. The UVA Breastfeeding Medicine Program is one example of a model for providing this support. Whether it is prenatal education, or specialized help for expectant mothers who wish to breastfeed but have risk factors, or staff education, or the implementation of best practices in the hospital, we are leading the charge. UVA participated in the National Institute for Children’s Health Quality’s Best Fed Beginnings program, which is funded by the CDC and began in 2012. Eighty-nine hospitals from around the country were brought together in this collaborative with the goal being to achieve Baby Friendly certification from the World Health Organization and UNICEF. We expect to have this certification completed in the next few months! Our follow-up phone calls to breastfeeding mothers and outpatient appointments help ensure that mothers and babies receive adequate support for the inevitable questions and problems that arise once home to help smooth their transition from the hospital and into parenthood. Since implementation, our rates of exclusive breastfeeding in the hospital have risen from 20% to as high as 60-70%, and our patient satisfaction on the inpatient unit has also risen as practices such as skin-to-skin contact and rooming-in are family-centered and lower the stress levels of mothers and babies.

It is possible to help mothers to make informed feeding decisions that best suit them and support them using evidence-based knowledge and techniques to reach their personal feeding goals. Educating ourselves and examining our practices is a good place to start and resources such as the UVA Breastfeeding Medicine program are here to help pediatricians, mothers and babies be successful.

“As advocates for our patients and their families, it is not our job or our place to tell mothers how to feed their babies, but we do have a responsibility to ensure that whatever health choices they are making are well-informed choices, and also to support those choices with evidence-based strategies.”



Innovative Therapies in Pediatric Hematology/Oncology

Kimberly P. Dunsmore, MD

Objective: Reader will be able to review new programs and protocol methods for use in difficult to treat hematology/oncology diseases in children.

ACGME Competencies: Medical Knowledge

At the University of Virginia Children's Hospital we are passionate about solving difficult children's health problems. But the most difficult problems require innovative approaches. For this reason, the University of Virginia Children's Hospital Division of Pediatric Hematology/Oncology is engaged in cutting edge research on multiple fronts in the pursuit of higher cure rates for children with especially difficult to treat cancers and hematologic diseases. We feel that collaboration is the key to harnessing innovation to answer important questions or solve difficult problems. Thus all of our projects for innovative treatments for pediatric cancers and hematologic diseases involve colleagues from many different disciplines: pathology, bioinformatics, molecular geneticists, and pediatric oncologists, who are both basic scientists and clinicians. It is team science at its finest.

In the United States, ~1 in 5,000 children ages 1 to 14 years develop cancer each year. Pediatric cancer research has made tremendous in-roads into effectively treating and curing many forms of childhood cancers, and the 5-year survival rate is now approaching 80%. Our Division has maintained a strong clinical trials program for pediatric oncology, with active participation in the NCI-sponsored Children's Oncology Group (COG). This group of over 200 institutions in the USA, Canada, Australia and Europe offers clinical trials for virtually every category of pediatric and young adult cancer, and its efforts have contributed to the amazing increase in cure rates for pediatric cancers. This author, Chief of Pediatric Hematology/Oncology at University of Virginia Children's Hospital, serves as a member of the COG Acute Lymphocytic Leukemia (ALL) Committee. My clinical research is in the area of T-cell lymphocytic leukemia (T-ALL). ALL is the most common cancer in children with cure rates dramatically increasing from 50% to 90% over the last 20 years as an outcome of clinical trial research. T-ALL has been a

more difficult form of leukemia to treat with cure rates of less than 50% for those with poor prognostic features. I serve as the Primary Investigator (PI) of two clinical trials with a novel agent, Nelarabine, which is a T-cell specific chemotherapy drug. The first trial was a pilot with 88 patients to evaluate the feasibility and safety of using Nelarabine in a multidrug chemotherapy regimen with the results reported in the Journal of Clinical Oncology. This led to the current Phase III COG international trial which enrolled 1,500 T-ALL patients. This is the largest study ever conducted of patients with T-ALL. My colleagues and I presented results of this trial December 2014 at the American Society of Hematology Plenary Scientific Session. The therapy in this clinical trial has resulted in the best cure rates ever seen in T-ALL, with an overall 4 year event free survival of 92%, and children with a particularly poor prognostic type of T-ALL, ETP, with previous cure rates of 20% had 4 year survival rates of 91%. Other activities in this area involve serving on the committee for the recently opened COG T Cell protocol AALL1231 which is looking at the new agent bortezomib in T-cell disease.

The University of Virginia Children's Hospital Division of Pediatric Hematology/Oncology is dedicated to finding novel approaches to understand and improve therapy for difficult to treat cancers and hematologic diseases in children. A new program offered at the University of Virginia Children's Hospital is the Innovative Therapies Program which is directed by Dr. Billy Petersen. The aim of this program is to improve access of novel therapeutics to pediatric hematology/oncology patients. To this end, it will offer cooperative group trials, pharmaceutical trials and investigator initiated trials. Dr. Petersen has successfully obtained funding for infrastructure support of the program, and the program has opened its first clinical trial evaluating a new agent for use in pediatric patients with sickle cell disease to decrease

pain and time to resolution of vaso-occlusive crisis. A second recently funded trial designed by Dr. Petersen employs the natural substance genistein as an adjunct therapy in pediatric cancer patients. This study will examine the utility of the soy-based isoflavone on reduction of chemotherapy side effects which can lead to significant illness, organ damage, treatment delays, increased health care cost and decrease in quality of life for our patients. If genistein is successful, this could have great effect on short/long term side effect reduction, health care cost reduction and improved quality of life for our children. The program has several other trials in the pipeline to be opened in the near future, including new therapies aimed at children with brain tumors.

While we have had major successes in increasing cure rates for children with cancer, it remains the leading cause of non-accidental death in children. In particular, we have not made significant progress in treating high grade solid tumors and relapsed or refractory cancers. The 5 year event-free survival (EFS) for patients with high grade and stage soft tissue tumors such as rhabdomyosarcoma, Ewing's sarcoma and osteogenic sarcoma is <30%, with relapses having survivals of <15-20%. Incredibly, we have relatively few targeted therapies for pediatric cancers and most



... continued from page 8

regimens rely on cytotoxic chemotherapies. Phase 1 and 2 treatments are available for children, but the majority of these regimens do not use targeted therapies, and if a molecularly targeted agent is used, it is most often not known whether a child's tumor expresses the target. In collaboration with colleagues in Biochemistry, Pathology and Public Health Genomics, our Division developed a now-funded program to offer molecularly targeted therapy to pediatric patients with solid tumor cancers who have relapsed or who have cancer that is resistant to chemotherapy and is progressing. Under this program, we sequence the entire genome of the primary and resistant tumor and search for mutations which are known to have pharmacologic therapies. This provides the ability to personalize therapy for their individual tumor and to use drugs/therapies which are not commonly used as chemotherapy for their tumors. A second objective of the study is to determine if there are certain mutations within a cancer that predicts failure or metastasis. If we can determine up-front those at risk for failure, then other therapies could be instituted earlier. This project allows us to try innovative, personalized therapy for incurable cancers in children. While a single agent may not be the complete answer to treatment for these children, it may allow us to change the disease from a lethal one to a more chronic one and allow a bridge until more definitive therapy can be devised. We are able to offer today to children what will be the standard of care in the near future, a more cogent therapy based on the careful analysis of an individual cancer rather than generic cytotoxic therapy. We will soon be expanding this therapy by working with a consortium of 20 institutions on a similar genomics protocol for children with recalcitrant cancers.

At the University of Virginia Children's Hospital, we are excited about the future for children's health and the use of innovative therapies to treat particularly difficult childhood diseases such as cancer. We look forward to collaboration with pediatric physicians and scientists both in our Commonwealth and globally to ensure success and improved health for our children.



Pediatric Heart Transplantation

Thomas J. L'Ecuyer, MD
Professor, UVA Pediatrics

Objective: Reader will be able to review indications for pediatric heart transplant evaluation. Review outcomes of pediatric heart transplantation. Review role of pediatricians in caring for a heart transplant recipient.

ACGME Competencies: Patient care, Practice-based Learning and Improvement and Medical Knowledge



Heart transplantation is the treatment of choice for end stage pediatric heart disease. The long term survival of children undergoing this procedure continues to improve, and in many cases exceeds 20 years with excellent quality of life. Based upon the population of the state of Virginia, approximately six to nine children from our state per year would need a heart transplant. Since January 2013, 21 pediatric heart transplants have been performed at the University of Virginia. The primary conditions leading to need to consider evaluation for heart transplantation are cardiomyopathies and select congenital heart diseases not amenable to standard surgical treatment.

Dilated cardiomyopathy is the most common type of myopathy, but restrictive and hypertrophic cardiomyopathies occur as well, and occasionally lead to the need for transplant. Cardiomyopathy typically presents with heart failure that is often progressive and may become refractory to outpatient therapy. Heart failure may present with exercise intolerance, growth failure, frequent respiratory infections, chronic cough, pulmonary hypertension, or may present with a more severely compromised circulation, including circulatory shock. The initial evaluation focuses on defining the type of myopathy and determining whether the myopathy is a component of a more generalized disease process. There is familial involvement in approximately 40% of children diagnosed with cardiomy-

opathy, so evaluation of family members (with cardiac and genetic testing) is an important component of evaluation and counseling. Medical therapy is initiated at the time of diagnosis and is tailored to the symptoms and type of cardiomyopathy. Initiation of medication is typically performed in the outpatient setting if the patient is well enough to be ambulatory. If the patient has more severe symptoms, medication can be initiated under

closer monitoring in the hospital. Some patients with cardiomyopathy respond well enough to medical therapy that transplant does not need to be considered; a smaller percentage can have improvement of cardiac function and may even have resolution of the need for medical therapy. Over time exacerbations of heart failure symptoms often occurs, requiring hospitalization for intensification of therapy, often including parenteral therapy. The need for hospitalization for parenteral therapy is usually an indication to begin evaluation for transplantation.

Congenital heart disease not amenable to surgical therapy is the other large category of heart disease leading to consideration of transplant evaluation. In some cases, neonates are born with lesions that are associated with poor survival with standard surgical therapy, and in these cases primary listing for transplant rather than surgical treatment is a consideration. More frequently, heart failure after surgical treatment is the indication to consider transplant evaluation. Congenital heart defects with single ventricle physiology are the most frequent congenital heart defects that require this therapy.

Evaluation of the child for suitability for transplant includes excluding other disease processes that preclude successful transplantation. Such diseases include chromosomal abnormalities or syndromes associ-

ated with very poor neurologic outcome and advanced disease in another organ system, especially the kidneys or liver. Once a child is deemed an appropriate candidate for transplant, their name is added to the national registry maintained by United Network of Organ Sharing. When an organ becomes available, it is offered to the appropriate child with the highest severity of illness.

Survival after heart transplantation in children has improved with better perioperative care and particularly with newer immunosuppressive agents. Transplant recipients have an excellent quality of life, going to regular school, participating in athletic events, and enjoying all activities other children enjoy. Exercise tolerance is typically excellent. The pediatrician plays a vital role in long-term care of these infants and children. Transplant recipients have increased susceptibility to infection, so need to be evaluated promptly with significant fever. If a focus of infection is found and the child is well-appearing, transplant recipients with infection may be managed as outpatients with oral antibiotics. Macrolide antibiotics alter the metabolism of the most commonly used immunosuppressive agents, so these should generally be avoided or a conversation with the transplant team should occur to make arrangements for increased monitoring. Fever that is high and without a source requires more extensive investigation, and since opportunistic infections are possible, we recommend this investigation take place where the child was transplanted. Exposure of transplant recipients to vaccine-preventable viral illnesses such as varicella require prophylactic treatment with IVIG and/or antiviral agents.

Immunizations are important in transplant recipients, but live virus vaccines are contraindicated. With comprehensive care provided by a team of pediatricians and transplant specialists, a child with a heart transplant should experience a healthy and active childhood.

VA-AAP NEWSLETTER REGISTRATION AND EVALUATION FORM

(Spring 2015)

You have the opportunity to claim up to 1 AMA PRA Category 1 Credit(s)™.

To claim CME credit, please complete the survey below or go to <https://www.surveymonkey.com/s/VAAAPSpring2015>.

NAME: _____

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For this activity, how many hours of CME are you claiming? _____ (Max. 1 hours)

As a result of reading the articles, will you make any changes in your practice? ☐ Yes ☐ No

Please list up to 3 strategies that you plan to implement as a result of reading the articles? (answer required for credit)

1. _____

2. _____

3. _____

If you will not make any practice changes, did this activity reinforce your current practice of pediatrics? ☐ Yes ☐ No
Please explain:

How could this activity be improved?

Future Topic Requests (optional):

	Excellent		Average		Poor
Overall, how would you rate this activity?	5	4	3	2	1

This CME activity will expire on May 2016.

Please send form to: Rosalind Jenkins, c/o CHKD, 601 Children's Lane, Norfolk, VA 23507

Please allow up to 8 weeks to receive your certificate.



Having a new baby...the happiest time of a woman's life, right? Not always.

Up to 1 in 5 new mothers will experience anxiety or depression, turning joy into sadness, worry, and confusion. These are the most common complications of pregnancy and childbirth, and they affect the entire family. According to the AAP, each year more than 400,000 infants are born to mothers who are depressed making postpartum depression the most underdiagnosed obstetric complication in America.

Just in time for Mother's Day, Governor McAuliffe has declared May as Maternal Mental Health Month. This yearly resolution happened due to the joint efforts of the VA-AAP Chapter and Postpartum Support Virginia. <http://leg1.state.va.us/cgi-bin/legp504.exe?151+ful+HJ606>

Channel 13 news continue to publicize and help us raise awareness about this very important issue. <http://www.13newsnow.com/videos/news/local/newsmakers/2015/05/05/newsmaker-maternal-mental-health-awareness/26944129/>

Several medical governing bodies recently addressed the issue:

- American Congress of Obstetricians and Gynecologists recommends clinicians screen new and expectant mothers for anxiety and depression AND encourages its members to begin medical treatment.
- American Academy of Family Physicians developed a toolkit to help screen and identify resources.
- American Academy of Pediatrics recommends pediatricians screen new mothers at well child visits.

Why should pediatricians screen?

Because pediatricians can see a child up to 6 times within the first 6 months of life, they are in a better position to identify mothers who are suffering from Postpartum Mood and Anxiety Disorders (PMAD/PPD). The nature and longevity of the pediatrician-patient relationship, coupled with the frequency of visits, allows mothers to develop a certain level of trust with their child's pediatrician and thus are more likely to speak to the pediatrician about other issues that may be affecting the child's environment, health, and well-being. The health status of a child is directly linked to and affected by the mother's perceived sense of health, mental and physical. Post-

partum depression can negatively affect the baby's neurologic development. Infants living in an environment with a depressed mother are likely to have delays in development and impaired social interactions and may be less likely to respond to interventional therapies. These children are more likely to experience problems with social-emotional and cognitive development. Pediatricians can empathize with the infant whose mother is depressed and unresponsive to crying or the needs of a baby to be changed or held and who does not make the infant feel valued, which is an early and critical foundation of self-esteem. If the mother is not treated, these issues will persist over time and will be less responsive to intervention.

Mothers who are depressed are less likely to read to, cuddle with, and interact with their child, leading to deficits in language acquisition. Infants of depressed mothers show less engagement and eye contact with their mother and are at risk for failure to thrive, attachment disorder, and development delay.

Depressed mothers are less likely to breastfeed, nurse for shorter durations, and have more negative emotions and experiences toward breastfeeding. 22 New mothers experiencing breastfeeding difficulties may be more likely to be suffering from PPD, highlighting the importance of screening.

In addition, children of depressed mothers are less likely to attend well-child visits, have their children receive timely vaccinations, and use emergency department facilities more frequently to attain health care services.

The screening instrument that has been most studied and has been endorsed by the USPSTF is the Edinburgh Postnatal Depression Scale (EPDS). <http://www.fresno.ucsf.edu/pediatrics/downloads/edinburghscale.pdf> The EPDS is a 10-question screen that can be given at the 1-, 2-, 4-, and 6-month well-child visits, based on current recommendations. A score of 10 or higher is considered positive and indicates that the mother may be suffering from anxiety and/or depression. Also, a positive response to question #10 about suicidal thoughts is considered to be a positive screen.

Many pediatricians are unable to comply with all the recommendations also because of lack of reimbursement coupled with the time

constraints. However, pediatricians can bill for maternal depression screening in the office setting. The Current Procedural Terminology (CPT) code 99420-Administration & Interpretation of Health Risk Assessment Instrument can be used for reimbursement. In order to use this code, a validated tool such as the EPDS, must be used. The EPDS has been recognized as a measure for risk assessment in the infant's environment and can be billed as part of the infant's visit. A copy of the scale must be placed in the chart, and the EPDS score should be documented as part of the infant's visit.

Although there are challenges to screening for maternal depression in pediatrics, with proper training, guidance, and appropriate referrals in place, PPD screening can be efficient and reimbursable without increasing the burden on the pediatrician and office staff. Taking care of a mother's mental health needs is a professionally rewarding opportunity because we will be making a long-term, positive effect on our most vulnerable pediatric population.

With the work of Postpartum Support Virginia (PSVa), Virginia has a network of health care providers, mental health professionals, and volunteers to assist new and expectant mothers experiencing anxiety and depression, helping pediatricians with the referral process when a mom screens positive, or just needs additional help. Postpartum Support Virginia, a non-profit organization, provides FREE assistance to new moms, including FREE support groups and referrals to mental health professionals, therapists, psychologists, and psychiatrists. Learn more at www.postpartumva.org.

Celebrate Mother's Day in a special way this year. Ask a new mom how she is doing. And tell her about Postpartum Support Virginia, where she can find hope and help.

REFERENCES:

1. Earls MF; Committee on Psychosocial Aspects of Child and Family Health American Academy of Pediatrics. Incorporating recognition and management of perinatal and postpartum depression into pediatric practice. *Pediatrics*. 2010;126(5):1032-1039.
2. Chaudron LH, Szilagyi PG, Tang W, et al. Accuracy of depression screening tools for identifying postpartum depression among urban mothers. *Pediatrics*. 2010;125(3):e609-e617.
3. Minkovitz CS, O'Campo PJ, Chen YH, Grason HA. Associations between maternal and child health status and patterns of medical care use. *Ambul Pediatr*. 2002;2(2):85-92.
4. Watkins S, Meltzer-Brody S, Zolnoun D, Stuebe A. Early breastfeeding experiences and postpartum depression. *Obstet Gynecol*. 2011;118(2 pt 1):214-221.
5. Sriraman, NK. Postpartum Depression: Why Pediatricians Should Screen New Moms. *Cont Peds*; Jun 2012; 29 (6):40-47.