Project ECHO Can ‘Democratize’ Specialty Care Access

With hepatitis C patients facing an eight-month wait, Sanjeev Arora, MD, FACP, had an idea to treat them faster. What if, rather than having patients make the hours-long trek to the University of New Mexico for care, their local clinician was trained to treat them? The solution cut patients’ waiting time to two weeks.

During his plenary address yesterday, liver disease specialist Dr. Arora explained how the University of New Mexico’s Project Extension for Community Healthcare Outcomes (ECHO) has not only helped hepatitis C patients in his state but has become a model to treat complex diseases in rural locations in the U.S. and developing countries.

“At ECHO, our goal is to democratize knowledge and get best practice care to people all over the world,” said Dr. Arora.

“In the U.S., we have two times the number of specialists than most of the world, yet rural doctors are saying they don’t have access to specialized expertise.”

Project ECHO solves this problem by using a telementoring process and guided practice, said Dr. Arora. Primary care physicians, including pediatricians, access the Internet via an iPad, mobile phone or computer with a web camera to join video conferences.

Throughout these two-hour “knowledge networks,” physicians present their patients’ cases, ask questions and discuss a care plan with the team of specialty experts at a hub, such as a university or other institution. Participants also can earn continuing medical education credit as they present cases or learn from others.

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Decorative Contact Lenses Can Devastate Eye Health of Children

Adolescents seeking to change their eye color, mimic a celebrity, enhance their pupils or enhance a Halloween costume are at risk for blindness or other serious ophthalmic issues when their “dress code” includes illegal decorative contact lenses.

Lenses that are not fitted and sized by an eye care professional are illegal. They can scrape the outer layer of the eye, resulting in corneal abrasions, and can be contaminated by microorganisms, said Michelle Tarver, MD, PhD, ophthalmologist and epidemiologist at the Food and Drug Administration (FDA) Center for Devices and Radiological Health, Office of Device Evaluation.

Dr. Tarver spoke on “Blindness in the Search for Beauty: Adverse Events from the Use of Decorative Contact Lenses in Children” during yesterday’s plenary session.

Young people are the most frequent abusers of decorative contacts. They buy them online, at tattoo parlors, Halloween stores and street kiosks.

The FDA, which does not recognize over-the-counter sale of contact lenses as legitimate or safe, has received numerous reports of corneal ulcers and blindness associated with some decorative contacts. Microbial keratitis — the most devastating complication — often results in permanent vision loss.

Decorative contact lens wearers have a five-fold higher odds of developing microbial keratitis compared to other types of Decorative Contacts, see page 8
Telementoring

“Telementoring is an evolving diagnosis and treatment of appendicitis.” Dr. Arora.

“Use of ultrasound as the first choice for radiologic diagnosis of appendicitis in children was a primary topic of discussion yesterday in a presentation led by Timothy Kane, MD, FACS, FAAP, professor of surgery and pediatrics, George Washington University School of Medicine. During the session, titled “Appy Hour: A Current Update on Pediatric Appendicitis,” pediatricians compared notes on what they experience locally.

“Currently, the American College of Radiology recommends ultrasound over CT for first-line imaging” (Rosen MP, et al. J Am Coll Radiol. 2011;8:749-755), Dr. Kane said. “Many publications indicate that the accuracy of ultrasound approaches 96%-97% and has become the initial test of choice to rule out appendicitis.

“CT scans are recommended for patients who are obese, have excessive abdominal rigidity or are uncooperative, or if ultrasound is equivocal. Parents, however, may push back on CT scans due to radiation exposure to children, use of intravenous (IV) or oral contrast and the high cost of the test.

“Depending on diagnosis and acuity, treatment options for acute appendicitis include surgery, a course of antibiotic treatment, drainage of abscess or phlegmon, or delayed or “interval” appendectomy. Dr. Kane also discussed the rationale for delaying surgery until the daylight hours.

“‘But it’s user dependent and the more scans you do, the better you get,’ he continued. ‘In our practice, we do almost 500 a year, so there are many more ultrasound of the appendix to look at, so they get really good. For community hospitals, they may be doing 150 a year, and they aren’t going to be as good at it.’

“CT scans are the other routinely ordered radiologic test. Often, they are more readily available than ultrasounds and are performed at most hospitals, said Dr. Kane, a member of the AAP Section on Surgery. CT scans are recommended for patients who are obese, have excessive abdominal rigidity or are uncooperative, or if ultrasound is equivocal.

“In a study, they looked at patients that had been diagnosed with acute appendicitis, and if they delayed surgery to the morning, there was no change in outcome,” he said.

“The traditional surgical procedure is an open appendectomy through a McBurney’s point incision. Today a laparoscopic appendectomy is preferred, Dr. Kane said. Conversion to an open appendectomy can be done if needed. ‘In 2015, not many places would go right to an open appendectomy for a child.’

“Dr. Kane also discussed the force-multiplication model to expand education of primary care physicians at a logarithmic rate. Dr. Arora said. ‘About 63,000 clinicians have been trained on hepatitis C and 12 other diseases. Of the 550 clinics held on hepatitis C, for example, more than 5,500 patients have entered into care. The trained primary care physicians become local experts in chronic diseases. Patients with Hepatitis C received safe, effective care from their rural primary care physicians, as well as other benefits, said Dr. Arora. ‘The cure rates were significantly higher than when they saw specialists in the U.S. treating hepatitis C.’

“Another benefit is cost-effectiveness. ‘The current model of specialty care is highly defective. It’s based on knowledge monopolies,’ he said.

“‘It’s not about building an organization,’ he said. ‘We want to create a movement to change the world for the better, for children all over the world.’

Telementoring, continued from page 1

“The strategy we have is to move knowledge not to move patients,” said Dr. Arora. Hubs are being set up across the nation and internationally to offer teleECHO clinics on pediatric chronic diseases such as asthma, autism, epilepsy and endocrinology. The Academy is a Project ECHO superhub for children and youth with epilepsy.

“The force-multiplication model aims to bring them back at six weeks. Then it’s relapsed. You will be hearing about this down the road,” he said. ‘What should be the management of children with simple appendicitis?’

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“Speak Up for Kids” Capitol Hill Rally

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Bring your white coat and join your fellow pediatricians at 12:00 pm Tuesday on the east front lawn of the U.S. Capitol for the “Speak Up for Kids: White Coat Rally at the Capitol.” AAP leaders and members of Congress will share updates about strong federal policies needed to protect child health.

A session to prepare for the rally, “Getting Ready to Rally,” will be held from 1:30-2:15 pm Monday at the Marriott Marquis, Independence Ballroom F-H. There, you will learn all the details involved with the rally: why we are here in Washington, DC, what to expect from the rally and why advocacy is so important.

“Tobacco Policy” Capitol Hill Rally

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route of tobacco toxin exposure; and 3) non-cigarette tobacco products represent emerging threats to children’s health.

The Academy recommends addressing parents’ tobacco dependence as part of pediatric health care and linking them to evidence-based treatment (counseling and medication).

When treating adolescents who want to stop smoking, there is good evidence for behaviorally based approaches. For teens with moderate to severe addiction, medications effective in adults are an option, though evidence is limited. Close follow-up is needed as non-adherence to regular medication use and relapse of tobacco use after stopping therapy are common.

Many teens and even parents mistakenly believe ENDS are safe “smoking” alternatives and are not aware that the solutions in the devices contain nicotine. Adolescents are more likely to become addicted even with sporadic use.

ENDS solutions also contain harmful carcinogenic and toxicants. The second-hand aerosol and thirdhand aerosol (vapor) contain nicotine, toxicants, metal and silicate particles. Pediatricians should become familiar with symptoms of acute nicotine poisoning, as highly concentrated nicotine solutions can be lethal when ingested even in small quantities.

The public policy statement suggests enforcing smoking bans in public places and multi-unit housing, and banning Internet sales of ENDS, all flavors, all advertising seen by youths and all deceptions in media. ENDS solution also should be dispensed in child-resistant packaging.

ENDS are not approved by the Food and Drug Administration as smoking cessation devices and should not be recommended as such.

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