

NIH News in Health

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New Directions, New Doctors

Changing from Pediatric to Adult Health Care

If you have a son or daughter who's leaving the nest this fall—whether off to college, a new job or some other adventure—you're probably facing a big change in your child's medical care. For those who are still a couple of years away, it's a good idea to start thinking about how you and your child will make the transition from **pediatric** to adult health care—particularly if your child has a **chronic disease** like **asthma** or **diabetes**.

"Pediatric and adult health care are very different," says Dr. Francine R. Kaufman, a pediatrician and NIH-supported researcher affiliated with the University of Southern California. "In pediatric care there's really an interaction and a focus on the parents as well as the child. In adult care, it's very common that the parents are excluded from the encounter altogether."

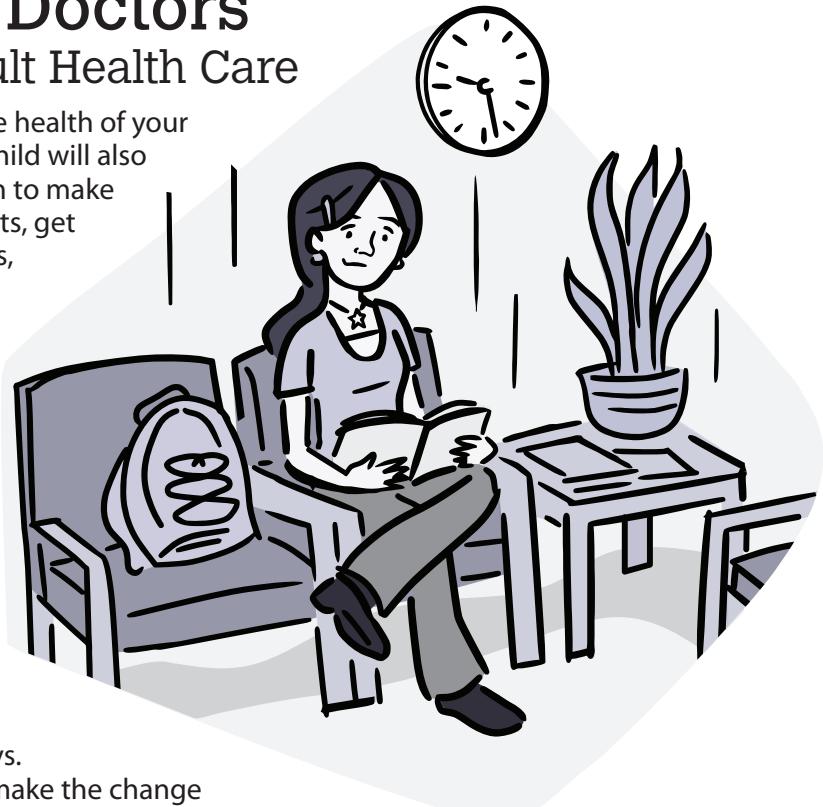
That means you might not be there to hear things that could be

critical to the health of your child. Your child will also have to learn to make appointments, get prescriptions, keep health records together, make insurance co-payments and manage many other details. "You have to prepare for this transition," Kaufman says.

When to make the change depends on many things. Some insurers and health care systems require patients to move to adult care by a certain age. Kaufman says families should definitely start to get ready to make the transition by the time a child is 18 years old. At that point, patients are protected by privacy laws. That means a health care provider can't share information with family or friends unless the patient gives explicit permission, which usually means signing a consent form.

Kaufman recommends discussing the timing with your pediatric care provider well in advance. Ask your doctor how long your child should remain in pediatric care before moving to adult care.

"It really should be collaborative," Kaufman says. "The patient and family have to be proactive. They



shouldn't just wait for their doctor to bring it up."

Plan with your pediatrician about how to make a transition that your child feels comfortable with. Kaufman says there should be at least a couple of years where the child takes on more responsibility but still has the family's support.

"Children need to have a couple of years practicing before they can fully participate in their care," she says. "They can start by being more vocal

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Definitions

Pediatric

Related to the medical care of infants, children and adolescents.

Chronic Disease

A disease that lasts a very long time.

Asthma

A lung disease that causes wheezing, coughing, chest tightness and trouble breathing.

Diabetes

A disease in which the body has trouble controlling the level of glucose—a type of sugar—in the blood.

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during their appointments. Have the child come in with a list of questions and concerns. Children should also be given the opportunity to manage their own medications and make their own appointments."

Once you have a plan to prepare your child for the transition, you'll need to find a new doctor. Kaufman advises choosing a primary care doctor well in advance who can help coordinate your child's care. It's important not to wait until there's a problem.

"Many kids wait years without care, or they wait until something



Wise Choices Graduating to an Adult Doctor

It's a good idea to give a child at least a couple of years, with the support of the family, to transition to a new doctor. Here are some major steps:

- **Make a plan.** Ask your pediatric care provider for advice on when to make the transition and how to go about it. It's usually a good idea to switch by age 18, or a little later for those with a chronic disease.
- **Talk to your children about expectations.** Explain what they'll need to do, from the start of the transition to when they become fully responsible for their own health care. (Many with chronic complex



Web Links

For more about the transition to adult health care, see our links online:

<http://newsinhealth.nih.gov/issue/Sep2010/Feature1>

happens and then they need care really quickly," she says. "Find someone you can transfer your records to and have an appointment with before something goes wrong."

Think in advance about what kinds of doctors your child will need. What will insurance allow? Will your child be able to get appointments—and get to the doctor's office—when

diseases may not become fully independent.)

- **Have your child gradually play more of a role.** Start by having your child make up a list of questions for the doctor, arrange their own appointments and refill prescriptions.
- **Choose a new provider.** Help your child find a new primary adult health care provider, if possible. Or plan the process he or she will need to go through after moving to a new school or area.
- **Send your child's health information.** Make sure the new care provider receives needed information from you and the pediatrician.

To download a transition checklist and other resources, go to <http://ndep.nih.gov/transitions/index.aspx>.

there's a problem?

The more complex your child's health care needs, the more providers you usually have to plan for. "That's where a good medical home really comes in," Kaufman notes. "You need to find a primary care physician who's helping coordinate care." Try to meet with the doctors you're considering, if possible, to make sure your child is comfortable with them.

Some medical centers set up transition appointments for their teenage patients with chronic diseases. The family, pediatrician and adult care workers all get together to discuss the best way to make the transition. "This really matters for chronic care of an underlying disease such as diabetes, which is team-based," Kaufman explains. "It's really important in those situations to have someone from both teams."

If your medical center doesn't arrange transition appointments, you can try to set one up yourself. Whether or not that's practical, you need to make sure the old and new offices are communicating with each other. Check that medical records are transferred over, along with any other information that the doctors will need to care for your child.

The process of changing from pediatric to adult health care may seem daunting at first, but with a little planning, it can all go smoothly. "This transition is really about getting the parents much, much more in the background," Kaufman says. The best way to do that smoothly is to start planning years in advance for a gradual change.

The National Diabetes Education Program has a number of tools to help with the transition process, including a checklist with a suggested timeline for having children take more responsibility for their own care. You can download and print these resources at <http://ndep.nih.gov/transitions/index.aspx>.

Bring the checklist to your doctor and use it to help discuss and plan the transition to adult health care. ■

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An Ear Full of Trouble

When Your Child Has an Ear Infection

Kids and ear infections—it's a pairing as familiar as cookies and milk. Ear infections are the most common reason for bringing a child to the doctor. In fact, 3 out of 4 children will have had at least one ear infection by the time they're 3 years old.

The scientific name for an ear infection is otitis media. It's an **inflammation** of the middle ear, which is located just behind the eardrum. It's usually caused by bacteria. Ear infections often appear after a cold or other upper airway infection, which can allow bacteria to grow in the middle ear. Fluid may build up behind the eardrum and cause severe ear pain. Other signs and symptoms can include fever and temporary hearing loss.

Children are especially at risk for ear infections, partly because a tube to the ear—called the **eustachian tube**—is less well developed in kids than in adults. This can make it harder for fluid to drain out and for normal air to get in.

To diagnose an ear infection, your doctor may use a lighted instrument called an otoscope to look at the eardrum. If it's red and swollen, your child may get a prescription for bacteria-killing drugs called antibiotics. Most kids start to feel better after just a day of treatment. Even so, antibiotics must be taken exactly as directed, usually for 10 days, to keep the infection from coming back.

Sometimes ear pain isn't caused by infection, and some ear infections

get better without antibiotics. So if the diagnosis is uncertain, you may be asked to wait a day to see if the earache goes away on its own. Using antibiotics cautiously helps prevent bacteria from becoming resistant to antibiotics, which could create dangerous situations during future infections.

If the infections keep coming back, your doctor may recommend a surgical procedure that places a small tube in the eardrum. "Research has confirmed that the tubes can prevent infections and maintain a healthy middle ear environment," says Dr. Gordon Hughes, an ear, nose and throat specialist at NIH. The most commonly used tubes stay in place for 6 to 9 months and require follow-up visits until they fall out.

The best way to prevent ear infections is to avoid things that put your child at risk. Keep kids away from second-hand smoke. Discourage taking a bottle to bed. Wash hands often to prevent the spread of germs. And make sure your child gets the flu vaccine each year.

A new vaccine called PCV13 protects against some of the most common bacteria that cause ear infections. The vaccine is recommended for all children under age 5. Check with your doctor to keep your child's



immunizations up to date.

NIH-funded scientists are working to develop and test additional vaccines. "Researchers are also looking at new ways to deliver high doses of antibiotics across the eardrum, which may help prevent some of the problems of antibiotic resistance," says Dr. Bracie Watson, an expert in genetics and hearing at NIH.

Although ear infections can be painful and troubling, the good news is that they're usually easy to treat. And it's just a matter of time until kids get older and are at less risk. ■



Wise Choices

Recognizing an Ear Infection

If your child is too young to say, "My ear hurts," look for these signs:

- Tugging or pulling at the ear(s)
- Fussiness and crying
- Trouble sleeping
- Fever
- Fluid draining from the ear
- Clumsiness or problems with balance
- Trouble hearing or responding to quiet sounds



Definitions

Inflammation

A protective response of the body, usually to infection or injury, that can cause redness and swelling.

Eustachian Tube

A small passageway that connects the middle ear to the upper part of the throat.



Web Links

For more about ear infection, see our links online:

<http://newsinhealth.nih.gov/issue/Sep2010/Feature2>

Health Capsules

For links to more information, see these stories online:
<http://newsinhealth.nih.gov/issue/Sep2010/Capsule1>

School Environment Affects Diabetes Risk

Healthier foods at school, longer and more intense physical activity and lessons in healthy lifestyles can reduce obesity and other risk factors for diabetes. These findings, from an NIH-funded study, suggest that school-based changes might help at-risk kids improve their health.

Nearly 1 in 5 school-age children in the U.S. is obese. This excess weight can lead to many health problems. The most serious is type 2 diabetes.

The new study was conducted at 42 middle schools where many students are minorities or from low-income families. Half the schools were randomly chosen to use the study's "intervention" program: longer gym classes, more nutritious foods and education in healthy behaviors.

About 4,600 students were tracked from the beginning of 6th to the end of 8th grade. At the start, nearly half were overweight or obese. Many had other signs of high diabetes risk.

At the end of the study, kids who had been overweight or obese at the intervention schools had a 21% lower obesity rate than those at the comparison schools. Other diabetes risk factors, like larger waist size, also fell more at the intervention schools.

"The study shows that a school-based program can help lower obesity and certain risk factors for type 2 diabetes in youth at high risk for the disease," says Dr. Griffin P. Rodgers, director of NIH's National Institute of Diabetes and Digestive and Kidney Diseases. ■

Closing In on a Universal Flu Vaccine

Scientists developed a way to generate **antibodies** that attack many strains of influenza viruses in animals. The success moves researchers a step closer to a universal flu vaccine—one that protects against multiple viral strains for several years.

Each year influenza, or flu, kills about 36,000 people nationwide. Researchers need to reformulate the vaccine each flu season because the viruses continuously change. A universal flu vaccine would block many viral strains for years and greatly control the spread of influenza.

NIH researchers were able to develop a vaccine that protects against multiple strains of the flu

subtype called H1N1. The vaccine includes a piece of DNA that makes a specific viral protein. They vaccinated mice, ferrets and monkeys. Some of the animals later received a booster shot of a seasonal flu vaccine.

Animals given both the DNA and the boost vaccines produced antibodies that blocked several H1N1 strains. The antibodies also blocked other flu subtypes, including H5N1.



Definitions

Antibodies

Germ-fighting molecules made by the immune system.



Featured Web Site Let's Move!

www.letsmove.gov

The website for the *Let's Move!* campaign, started by First Lady Michelle Obama, offers a wealth of information and inspiration for staying healthy and reducing childhood obesity. Get tasty recipes, watch videos to help you prepare healthy and affordable meals, and find fit and fun activities for your family.



The scientists next tested to see if the vaccine could protect animals from infection. After getting the boost, 20 mice were exposed to the deadly 1934 flu virus, and 80% survived. Mice receiving DNA only or seasonal flu vaccine only all died. Ferrets who got the DNA-boost vaccine were also protected from infection.

"This significant advance lays the groundwork for the development of a vaccine to provide long-lasting protection against any strain of influenza," says Dr. Anthony S. Fauci, director of NIH's National Institute of Allergy and Infectious Diseases. ■

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