

Use of telemedicine expanding in Ohio

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By JAMES HANNAH The Associated Press

CHILLICOTHE, Ohio (AP) — Things were bad — then they got worse.

Stacie Traylor's baby had to be delivered five weeks early via Caesarean section because she had diabetes during her pregnancy. Then, Traylor was told her premature daughter had a collapsed lung.

Finally, she learned that doctors were thinking about transporting her newborn 45 miles to Columbus for treatment, a move that would separate mother and daughter at a crucial bonding time.

"It was awful," Traylor, 30, recalled. "Cried a lot. A lot of fear. Scared for her. You don't know if she's going to make it.

"I wanted to be right there with her."

Doctors at Adena Regional Medical Center turned to telemedicine, the spreading practice of using a computer network to conduct long-distance exams and transfer medical information.

They treated young Emilie in Chillicothe by using a computer connection along with high-definition cameras and video monitors in the nursery to link up with neonatal specialists at Nationwide Children's Hospital in Columbus.

The consulting arrangement marks the beginning of an expansion of telemedicine in Ohio, which has vast rural areas across Appalachia and between Cincinnati and Toledo. Nationwide Children's plans to establish a connection with a hospital in Zanesville later this year and is shooting for links with four other hospitals serving rural areas next year.

The hardware costs hospitals about \$7,600.

Dr. Rachel Brown, a physician at Nationwide Children's, said the high-definition connection enables doctors to see a newborn's color and breathing, determine whether the child might be in shock and evaluate blood pressure.

Children's Hospital Medical Center of Akron is using telemedicine to connect special-needs children at two schools in rural areas of Ashland and Wayne counties to their family doctors if the children get sick at school. The system features video conferencing, electronic stethoscopes and the capability to transmit photos of symptoms.

The hospital plans to expand to two more schools.

Nationally, the use of telemedicine has grown to about 200 networks that link 3,500 sites. It's being used to treat patients in rural hospitals, monitor patients in their homes, evaluate X-rays and lab tests remotely and provide mental-health counseling.

Doctors at the Richmond VA Medical Center are consulted via video hookup about cardiology patients at the Beckley (W.Va.) VA Medical Center, which is 200 miles away; the TeleCare Network in Bismarck, N.D., uses video conferencing to deliver mental-health treatment from psychiatrists to patients in nursing homes and group homes in North Dakota, South Dakota and Montana; Richard Schein, a graduate student at the University of Pittsburgh, uses video conferencing to outfit patients in rural areas with wheelchairs.

The growth of telemedicine is being fueled by the decreasing cost of the technology, the lure of gaining access to medical specialists without having to travel, and the prospect of lowering health-care costs by keeping patients out of more expensive hospitals, said Jonathan Linkous, chief executive officer of the American Telemedicine Association.

However, Dr. Susan Wentz, director of NetWellness at Case Western Reserve School of Medicine, said video conferencing can miss patient cues, such as nuances of body language and what patients show

through their eyes.

"There's nothing like having a person in the room with you," Wentz said. "That human presence and interaction is something that can't fully be transmitted technologically."

Dr. John Fortney, pediatrician and senior medical director at Adena, said he first viewed the technology as an expensive toy but has since been won over.

"This is the wave of the future," Fortney said.

Pediatricians at Adena have used the connection between 50 and 100 times, mostly to consult with the specialists in Columbus about a patient. Transporting patients to Columbus has declined by about half.

"I can present them with special problems I'm having and be able to direct them visually to the area I'm concerned about," Fortney said.

The doctors use the Ohio Supercomputer Center's high-speed optical network, which has more than 1,850 miles of fiber with the large bandwidth necessary to transmit high-definition images in real time.

However, Brown acknowledged that telemedicine has its limitations. For example, the doctors in Columbus can't touch the baby or listen to its heartbeat.

But she said the network can be instrumental in determining whether a baby should be transported to Columbus — an expensive (\$5,000) and sometimes traumatic trip.

Traylor said she and her husband could have gone to Columbus to be with their newborn, but leaving their 9- and 5-year-old daughters behind with family and then having to stay in motels for several days would have been an emotional and financial hardship.

"It was very, very stressful for us," she said. "It was nice she was able to stay down here. I was very thankful."

On the Net:

American Telemedicine Association: http://www.atmeda.org/

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