

# Telemedicine saves transport costs for family with triplets

## Newborn diagnosed with heart murmur

### Special to the Daily News

Technology to the rescue.

Telemedicine solution provider American Educational Telecommunications (AET) completed a first of its kind, real-time remote diagnosis of a newborn baby's heart murmur between Faith Regional Health Services and Children's Hospital and Medical Center in Omaha.

The diagnosis used advanced wireless video conferencing technology through a mobile camera device connected to an ultrasound machine.

A baby boy was one of triplets recently delivered by Dr. Keith Vrbicky, of Midwest Health Partners, and an attending physician at Faith Regional.

The baby's pediatrician, Dr. Jayan Vasudevan, also with Midwest Health Partners, became concerned about an obvious heart murmur of one of triplets while performing a post natal examination.

Vasudevan immediately requested a consult with a pediatric cardiologist to diagnose the severity.

The closest pediatric cardiologist was at Children's Hospital.

The doctors agreed to set up a telemedicine consult utilizing a remote echocardiogram system connected to a mobile and wireless transmitting video conferencing device, rather than immediately transporting the baby to Omaha.

"If the diagnosis could be determined to be a mild defect, it would enable us to keep the family together in Norfolk and immediately eliminate the uncertainty of a potentially harmful heart defect," Vrbicky said. "Without the telemedicine consult, there was a real possibility that the baby would have had to be transported either via helicopter or ambulance to Omaha at a very high cost."

To perform the remote diag-

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MIDWEST HEALTH PARTNERS

nosis, a Phillips 5500 ultrasound machine at Faith Regional Health Services was connected to a Librestream Onsite 2000R video device through an S-video connection.

The video was securely encrypted by way of AET's secured network technology system and streamed live to Dr. Scott Fletcher, a cardiologist with the University of Nebraska Medical Center/Creighton University Medical Center, joint division of Pediatric Cardiology in Omaha.

Fletcher was able to view the ultrasound from Children's Hospital and provided an immediate confirmation of diagnosis — a mild muscular ventricular septal defect — to Vasudevan. The defect is not life threatening or lifestyle limiting.

The diagnosis alleviated the fears of everyone involved but particularly the parents of the newborn.

The telemedicine technology utilized was a result of the combined efforts of AET, its remote wireless device provider, Librestream; Phillips, and the IT support from AET and both hospitals.

This was a first of its kind use of the combined technology.

AET was able to set up the secure network infrastructure between Faith Regional Health Services and Children's Hospital within 30 minutes.