Telemedicine

By Amy Bentley

Dr. Jason M. Knight
CHOC Pediatric Transport and Telemedicine expert

Dr. Knight is the Medical Director of the CHOC Emergency Transport Services Program and an Assistant Clinical Professor at UC Irvine. He completed his residency training, including a year as chief resident, at Harbor-UCLA Medical Center. He completed a three-year fellowship program in pediatric critical care medicine at Harbor-UCLA Medical Center and CHOC Children’s. Under Dr. Knight’s leadership, the CHOC Transport team has become one of the busiest pediatric transport teams in the nation, able to pick up patients from 130 different hospitals throughout California. The transport team also arranges long distance and out-of-state transports via both rotor and fixed-wing aircraft.

Dr. Knight’s philosophy of care: “I believe all children deserve to receive world-class care at a children’s hospital. For many children that care begins with CHOC’s Emergency Transport Services Team. Our team is truly an extension of CHOC and the Pediatric Intensive Care Unit, and I take great pride in our team’s ability to assess, resuscitate and stabilize patients before they arrive at CHOC.”

WHAT IS TELEMEDICINE?

“Telemedicine encompasses a broad range of different applications,” says Dr. Knight, CHOC’s Pediatric Transport and Telemedicine expert. In a nutshell, telemedicine, also sometimes called telehealth, is the delivery of health care services using telecommunications or electronic technology. Telemedicine can involve video and audio equipment to assess a patient remotely, patient portals, remote monitoring of vital signs, the use of smartphones and tablets and remote medical education efforts. Telehealth also can include giving consumers medical and health information via the Internet or wireless devices, including access to online discussion or peer support groups.

CHOC AND TELEMEDICINE

CHOC has become a leader in telemedicine nationwide. “The way we utilize telemedicine at CHOC is to help assess and triage patients in settings outside of our own walls. Most hospitals do not have telemedicine capabilities that would allow a pediatric specialist to provide assessment and triage remotely,” explained Dr. Knight. “Our experts can assess patients in emergency departments at other hospitals with a mobile telemedicine unit called the RP-Xpress that the CHOC transport team takes with them into the field. The RP-Xpress works through Wi-Fi or a cellular signal and allows a specialist back at CHOC to evaluate the patient using both video and audio. That assessment happens sooner than if we had waited until the patient arrived at CHOC and it may determine if the patient needs intervention right away.”

30 PERCENT INCREASE OVER THE PAST FIVE YEARS IN THE NUMBER OF PATIENTS TRANSPORTED TO CHOC ANNUALLY

4,000-4,200 ANNUAL NUMBER OF PATIENTS TRANSPORTED TO CHOC IN EACH OF THE PAST THREE YEARS

10 million ESTIMATED NUMBER OF AMERICANS WHO BENEFITED FROM TELEMEDICINE SERVICES IN 2013, ACCORDING TO THE AMERICAN TELEMEDICINE ASSOCIATION