Excerpt from article: **Device Integration: Getting Point-of-Care Data Where It's Needed**

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Another integration option combines hardware/software to deliver information. This technique, used by vendors including CliniComp and Capsule Systems, transmits device data to a concentrator or repository, which converts the data to a network packet and forwards it to a server. Data are converted to a useable format, such as a flavor of HL7, and forwarded to the facility's health information system.

At Baptist Health South Florida, a five-hospital health system and the largest not-for-profit health care organization in the region, the effort to integrate devices began in 2002 as part of the healthcare system's effort to get away from paper records, says Melissa Barthold, MSN, RN-BC, CPHIMS, FHIMSS, Corporate Manager, Nursing Informatics at the health system.

Baptist Health South Florida has implemented CliniComp's Essentris clinical documentation system for their perinatal departments in three of the five hospitals, says Barthold.

The CliniComp system collects data from bedside devices in all perinatal units, including neonatal intensive care units (NICUs), and sends it to the documentation module via two routes. A data acquisition system (DAS) connects serially to bedside fetal monitors, ventilators, and non-networked physiological and cardiac monitors, and stores data from these devices. Data from centrally networked devices can also be collected and stored by the DAS. Essentris software then converts the data into usable information. Data buffering capabilities allow each DAS to continuously receive data and store it into local memory for a minimum of 24 hours.

"As long as a device can send the data out, the Essentris system can interface to that device through the DAS. No matter where they go in the system, in Essentris, they can acquire the data from multiple sources," says Barthold.

"If everything is plugged in, it pretty much works," says Barthold. She has the numbers to prove it. After the integration implementation, average time for nurses to input vital signs in intensive care units dropped from 4 minutes to 20 seconds, she says. The average time required by respiratory therapists to document ventilator settings in ICUs dropped from 5 minutes to 3 minutes with implementation of the biomedical device integration system, Barthold adds.

More than 1,000 nurses now use the system, she says. "We planned it only for nursing, but others liked it so much they want to document there, too," she says.