ENRSoutheast

December 2, 2016 UMV: 63,744

Emerging Technology and the Patient Experience

Within the past 10 years, technological advances in health care construction have skyrocketed. This includes everything from using technology during the actual construction of a facility to creating a facility that is capable of hosting numerous medical technologies that drive efficiency and quality for the hospital staff and patients.

"From the construction standpoint, there is a growing acceptance of the use of communication software and iPads at the jobsite to facilitate more efficient resolution of issues," says Robins & Morton's President and COO Robin Savage. "There is also a growing use of robotics in layout, scanning and technology for assessing existing conditions, and the use of drones for monitoring progress and safety observations. Post-construction, the facilities have to be built in a way that enables the medical use of smartphones, tablets and telemedicine to improve patient care and access to care."

The growth of BIM and the movement toward paperless jobsites have been noticeable advancements in the past decade or so, according to Matt Bishop, project executive with DPR Construction. However, he cautions, "We have to remember to continue to incorporate the basic practices that work. At the end of the day, we are builders, and it is the people running the technology that are driving project success."

Regardless, it's all about the patient. Bishops says, "When I have an opportunity to build a $100-million ground-up cancer treatment center, and I know when the doors open that millions of people will experience more comfort during their treatment as well as a chance to have access to the best researchers in the country, I feel lucky to have been a part of the team making this possible in our community."

Caring for Patients

Maintaining a healing environment in an occupied facility where patients are

During the expansion construction work at Tampa General Hospital's Neonatal Intensive Care Unit, Skanska USA utilized its inSite Monitor technology to help ensure the patients' comfort and safety.

Skanska USA completed the expansion of the Tampa General Hospital's Neonatal Intensive Care Unit a few years back, which included adding more patient rooms and a new transition nursery.

being treated and/or recovering from medical procedures is a big concern for hospital administrations and those who are conducting onsite construction.

Skanska's proprietary technology, inSite Monitor, tracks data on air pressure levels, noise levels and air particles concurrently, allowing them to track environmental conditions within health care facilities, ensuring the comfort and safety of patients throughout the construction process.

"When working in a hospital, we are aware that it is an environment in which patients are being cared for. We want to eliminate impacting that environment during construction," says Fred Hames, executive vice president and general manager at Skanska USA Building in Florida. "When we built the new NICU at Tampa General Hospital, it was right next to the existing NICU. Using the inSite Monitor created awareness for us on how the new construction was affecting patients, and it also allowed for transparency in our activities."

The Actual Build

"In general, there is a lot of interest in prefab construction," says Peter Dyga, president and CEO, East Coast chapter, Associated Builders and Contractors (ABC) of Florida. "Anything that is repetitive with one set of plans that can

At the Golisano Children's Hospital expansion and renovation project, Skanska USA is utilizing prefabrication of some components offsite. It increases the quality of the product and makes it easier to build more sophisticated systems.