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INTEGRATION EXPANSION TO UNION HOSPITAL EXPANSION**

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Union Hospital is the largest provider of health services between Indianapolis and St. Louis, serving west central Indiana and eastern Illinois. The hospital strives to meet the healthcare needs of the region through compassionate, efficient and high-quality services. In this effort, Union Hospital embarked on an expansion that has set a new standard for healthcare in the area. With cutting-edge technology in mind, the hospital selected Johnson Controls to install wireless controls, and integrated fire alarm and security systems in the new facility.

The five-story, 575,000-square-foot expansion features a more spacious design with private rooms, convenient access and much better parking. As the single largest construction project in the history of Terre Haute, the new facility will have a significant economic impact. Since its beginnings in 1892, Union Hospital has continuously improved and expanded its services and facilities to provide care to the region's residents.

“Johnson Controls has had a presence at Union Hospital since 1968. The reason they’ve maintained that presence is because they have excellent products and support,” says Dave Snapp, director of construction development for Union Hospital. Despite this history, Snapp needed assurance that Johnson Controls could provide what the hospital was looking for in the new facility, especially the fire alarm component. “We narrowed the list of vendors down to six and then Johnson Controls kept making the cut. Ultimately providing us not only the added value of integrated systems but also cutting-edge wireless technology,” states Snapp.

Wireless approach saves costs, simplifies installation

Union Hospital involved Johnson Controls in the design-assist process, allowing them to bring new ideas to the design team for consideration such as making the building management system completely wireless. A Metasys® building

“Our goal was to provide the Wabash Valley with a modern facility offering a healing environment, a focus on the patient, and a respect of the environment.”

Kym A. Pfrank

Vice President and Chief Information Officer Union Hospital

management system, used to monitor and control HVAC systems and equipment at four existing facilities, was expanded to the new hospital as part of the project. Hospital executives visited Johnson Controls Customer Center Showcase at its headquarters in Milwaukee, Wisconsin to see first-hand how the wireless system works.

Excited with what they saw, the executives asked Johnson Controls to rebid the project, switching from a wired approach for the Metasys system and temperature controls to a wireless one. A move that eliminated the need to install conduit stub-ups for the temperature controls and pull the communications bus, and one that saved the hospital more than \$51,000 when compared to the wired approach.

In addition to a reduction in cost for the hospital, the construction team realized the added benefit of compressing and simplifying its work schedule. By not having to manage and coordinate the installation of room thermostat rough-ins and BACnet communication wiring for 400 patient rooms, the team was better equipped to meet project deadlines.

Fire alarm, security system integrations are key

The new hospital expansion also features a Johnson Controls IFC2-3030 fire alarm system and P2000 security management system. All four existing facilities on the Terre Haute campus were retrofitted with the IFC2-3030 and P2000 systems as part of the project. The systems are fully integrated with the expanded Metasys system, which is used to monitor and control HVAC systems and equipment at the main hospital, cancer center, professional office building, ambulatory surgery center, and the new hospital.

This integration creates a common platform for all of the systems across the entire campus. If a fire or security alarm is activated, hospital personnel can monitor it through Metasys and take appropriate action. The Metasys system is also used to monitor and control HVAC equipment at Union Hospital's second location in Clinton, Indiana.

The ability to integrate these systems was a key factor in selecting Johnson Controls. “I was very pleased to see that the fire alarm and security systems could be integrated with the expanded Metasys system,” says Snapp. “It brings added value to the Metasys system we already had in place while giving us the ability to monitor and control all the systems from a single location.”

Johnson Controls maintains the Metasys system under a service agreement. The goal is to fine-tune the system and implement energy efficiency strategies to continually optimize HVAC equipment performance and reduce operations costs wherever possible. Under a planned service agreement, preventive maintenance is conducted on variable air volume boxes, air handlers and YORK chillers.

In addition to card access at primary entrances across campus, the P2000 system is used to monitor and control 36 prescription drug drawers in the pharmacy at the new hospital. With the swipe of a card, authorized personnel can access and dispense medicines as needed. The hospital is also a beta test site for Johnson Controls new power over Ethernet card readers. The access control system is being upgraded continually campus-wide, including an interface with the digital video recording system and surveillance cameras.





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