

Parker Adventist OR/Med Surge

Parker, Colorado

Overview & Contribution

The Parker Adventist Hospital Operating Room/ Medical Surgery (OR/Med Surg) project was a major step in meeting increased healthcare needs within the community, while allowing the hospital to grow in its mission. The project included the addition of a two-story, 6,650 square foot building adjacent to the existing emergency department (ED) and surgery departments, and an additional 6,525 square feet above the existing children's ED. Lobby-level construction included the addition of four psychiatric patient rooms for the ED, as well as a new staff lounge, LVR room, and waiting area. Four new operating rooms and two shelled future operating rooms were added on the second level along with new staff locker rooms, staff lounge, offices and storage areas. As part of construction for the new ORs, various renovations to the existing pre-op and post-anesthesia care unit (PACU) areas were completed alongside renovations to an existing OR to transform it into a new gastrointestinal (GI) operating room.

The project increased the total number of operating rooms at the hospital, providing local access and service for the community. Rehabilitation space was also built for patients, and both the patient room wing and rehabilitation space were designed to feel like home to improve patient recovery time.

The two-story precast concrete and stone veneer parking structure added 170 additional parking stalls to the campus, improving patient and visitor accessibility. Tenant finishes for a new, twenty-four-bed neurological/joint/spine medical surgery unit were constructed within the existing hospital's shell space. The selected finishes are high-end to resemble a hotel, as the space is intended for patients' short term recovery. Also, within the space is a new rehabilitation gym and education room to help patients recover quickly and return home faster.

**Category 9: Best Building Project –
General Contractor (\$10 - \$40 million)**
Contractor: GE Johnson Construction
Project Name: Parker Adventist OR/
Med Surge
Project Value: \$23.7 million
Architect: Boulder Associates
Start Date: 10/24/2014
Completion Date: 12/18/2015

Challenges

The OR/Med Surg project presented several challenges which were successfully addressed by the project team, including appropriate management of noise and disruption, constant maintenance of access for the ambulance, and the need to respond effectively to inclement weather delays. Due to the adjacency of the project to functioning operating rooms and office spaces, preventing construction noise and facility disruption was top of mind for GE Johnson. Construction work that was noisy and caused vibration was sometimes suspended due to the proximity to the pre-op area where patients were awaiting procedures. The project team continually communicated with Parker Adventist Hospital staff in order for everyone to work together toward the best solutions and to execute the work while managing patient experiences. This project also entailed several renovations within the PACU pre-op areas, which were all preformed with little impact to the hospital's operations. GE Johnson's strong relationship with the facilities and administration of Parker Adventist contributed to the successful phasing of the projects to allow for continued hospital operations.

A new building section was added adjacent to the ambulance entry, which had to remain open and accessible for the project duration. This portion of the project was also adjacent to functioning operating rooms and the children's hospital. These areas needed to remain open and functioning while we built in close proximity; accordingly, a temporary entrance was constructed and an elevated platform was installed for the work to occur above the ambulance drive. This approach was well coordinated with the EMS staff at the hospital so all users felt the approach was effective.

While GE Johnson employs the most stringent safety protocols on every project, the close proximity of construction work to the ambulance entry and patient interaction presented a heightened level of safety precaution. The project team pre-planned each delivery in order to coordinate and maintain access for ambulances and fire trucks at all times. The safety program was designed to also minimize exposures to hospital patients. Ultimately, the project logged **54,996 labor hours with no lost time injuries.**

Prior to this project, Parker Adventist Hospital, like most healthcare facilities, was struggling to provide enough patient and visitor parking. This project closed a large parking area for nine months while a new parking structure was built. The original schedule for construction of the two-story precast garage was a seven-month duration, so a temporary lot was constructed for employee parking. In the spring when it was nearing completion, the area experienced one of the wettest springs on record. This prevented the topping coat from being installed for more than a

month. GE Johnson coordinated the opening of the lower level for parking, while the top level remained closed until we were able to install the topping slab. The hospital staff was pleased with the phased availability of new parking, in spite of the weather delays.

Successes

This project was a success due to the high level of interaction, coordination, and communication among the hospital staff and construction team. GE Johnson was able to minimize the impacts of weather delays on the projects through planning and phasing strategies.

The ability for the hospital staff to perform their daily functions to support patients was of paramount importance to the project team. GE Johnson achieved this requirement through daily interactions with the staff and coordination of phasing to support hospital operations. The project team placed enormous effort into going above and beyond typical project responsibility to keep the project interruptions as painless as possible for the users and patients. There were several instances when the operating rooms were shut down overnight or over a weekend in order to make critical mechanical system connections. This was a team effort to determine how to protect and minimize the impact to the hospital's business, but allowing the construction team to access the space so that the new OR areas were completed to the highest quality and on schedule. The success of these efforts was evident with the OR staff, as well as the Pre-Op and PACU staff. The project team was able to work within the facility and minimize impacts to the daily functioning of the hospital.

Despite the close proximity of construction work to the ambulance entry and patient spaces, material delivery never limited access for ambulances or fire trucks to access the facility. Close coordination with the EMS staff at the hospital ensured all users felt that the approach allowed them to perform their work without interruption. The safety program, which was designed to minimize exposure to hospital patients, successfully logged 54,996 labor hours with no lost time injuries.

Impacts were minimized through GE Johnson's Facility Disruption Avoidance (FDA) planning process to coordinate the numerous shutdowns and interruptions to the facility. This included multiple shutdowns of all ORs and power to large sections of the hospital. Through the communication and pre-planning for these events, all shutdowns went very well and the hospital was prepared and able to manage continuous operations. Pull planning was performed by the construction team to verify schedules for the construction, and all of the subcontractors were included in the development of the schedule. This approach allowed the team to

incorporate the addition of ED and trauma room renovations – a value of \$1 million in changes – only extending the original schedule by three weeks.

The Parker Adventist staff was pleased with the execution of the project, including the operating room (OR) director, who was quite satisfied with the outcome of the project and has recommended GE Johnson for excellent project performance.



Emergency Department Demolition



New Emergency Department Ambulance Drive



New OR Addition



New Parking Garage



Med Surg Central Chart Station



Med Surg Rehab Gym



Med Surg Corridor Outside of the Rehab Gym and Conference Room



Med Surg Waiting Area



Med Surg Patient Room



Med Surg Conference Room