Emory University Hospital

Improving the efficiency of a growing facility

Emory University Hospital has been named one of US News and World Report's "America's Best Hospitals" for several years. Emory University Hospital is a 587-bed facility and is the only multiple-organ transplant center in the state of Georgia. The hospital is located on the Emory University campus in northeast Atlanta. The hospital is also the largest transplant center in Georgia and one of the most diversified in the Southeast, offering heart, heart-lung, kidney, liver, pancreas-kidney, cornea, bone and bone marrow transplants. Emory University Hospital serves more than 24,000 inpatients and some 80,000 outpatients each year.
The Challenge

As the facility grew, the ability of its medical professionals to do their jobs efficiently became more difficult. Patient care departments were located more remotely from the supporting ancillary departments than ever before. Longer turnaround times for laboratory tests and pharmaceutical requests were the result. Initially, the hospital had elected to revitalize the existing 1940’s vintage Brushomatic Pneumatic Tube System (PTS) that had been shut down for several years. The lack of reliability and accountability of the Brushomatic proved it to be unacceptable for the transport needs of the facility, and an expensive messenger staff had to be maintained.

With the addition of the new “E” wing, the staff had to evaluate the material handling options for the new area. Four material transport choices were considered:

1. Expand the existing pneumatic tube system (PTS)
2. Operate a mixed system and purchase a new generation PTS for the expansion areas only
3. The complete conversion of the PTS
4. Invest in additional staff to manually move material

The Solution

After extensive evaluation, Emory determined that investing in a new PTS system was the smartest option. They were shown how they could recapture a portion of their original investment through use of the old system’s existing steel tubing.

The next consideration was vendor selection. The Emory team closely examined manufacturer track records, experience in complex healthcare environments, system reliability and service capability, which were all key to earning employee confidence and realizing the projected cost savings. Emory selected Swisslog Healthcare to install 70 stations in two phases and additional stations in a 65,000 square-foot “H” wing of the hospital.
Measures of Success

After installation, the Swisslog Healthcare TransLogic® system processed 2,300 transactions per day. This figure increased to 3,000 per day after the additional stations came on-line. The PTS is used to automate a wide variety of tasks. Nursing uses the system to send:

- medication orders
- dietary menus
- specimens
- transfer paperwork between units as patients change locations
- distribution of materials for charting, such as radiology reports

Four decentralized pharmacies, an IV stockroom, one central pharmacy stockroom and administrative areas make up the physical pharmacy system at Emory. Each of the six locations has a PTS station which enables them to send to each other, be resupplied on-demand from a stockroom and send medications to the units.

Procedures that assure adherence to infection control standards have been developed allowing the laboratory to use the system to improve turnaround time for both STAT and routine requests. At this point, Emory has a fully integrated material distribution system.

“We have reduced our messenger staff by about 75 percent, or 12 FTEs, while increasing our efficiency.”

— Associate Hospital Director, Emory University Hospital
Conclusion

Since the original installation of the 4-inch TransLogic CTS-30 system, Emory University Hospital has upgraded 53 stations with Nexus panels, and 20 stations have been upgraded to Nexus™ Stations.

The Swisslog Healthcare PTS has delivered the targeted Emory University outcomes. Results include:

— Messenger service staff has been reduced by about 75 percent, or 12 FTEs, while increasing efficiency.
— Energy costs have also been substantially reduced and repeated on an annual basis.
— The employees are pleased and have more time to respond to patient care needs.

Swisslog Healthcare

At Swisslog Healthcare, we strive to lead change for better care. At the core of this vision is a focus on improving workflows and reducing the time clinicians spend doing repetitive tasks—enabling more time to care for patients and residents. Our solutions and services extend across the continuum of care, including transport, medication and supply chain management for long-term care facilities, consolidated service centers, hospitals and health systems.

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