When administrators at Penn State Milton S. Hershey Medical Center considered adding life-saving blood products to the list of items transported in their pneumatic tube system, they knew safety was paramount. They also knew the pneumatic tube system they were using at the time was not up to the task.

“We were not confident in our previous tube system’s ability to accurately track and confirm the arrival of our blood products,” said Christine Kerr, compliance and quality improvement coordinator at the 551-bed hospital.

The construction planning process for the new Penn State Hershey Children’s Hospital presented an opportunity for decision makers at the Medical Center to look at all available tube system options. Pevco, a Baltimore-based manufacturer of pneumatic tube systems for hospitals, offered systems that were both affordable and capable of meeting Penn State Hershey’s operational needs. Pevco provided the accountability administrators needed to feel secure about safely transporting blood components in their tube system.

Penn State Milton S. Hershey Medical Center, located in Hershey, Pennsylvania, is a medical school and teaching hospital of Penn State University.

Since the Medical Center accepted its first patients in 1970, its campus has grown from 318 to 550 acres and many additions have been made to the academic, research and patient care facilities. Within the past few years, the Medical Center has completed several construction projects, including Penn State Hershey Cancer Institute and the brand new 72-bed Children’s Hospital. These additions reflect a steady increase in patient demand for services and the expansion of research and teaching programs.

Like most large hospitals, Penn State Hershey Medical Center used a pneumatic tube system to transport specimens, pharmaceuticals and other small medical items throughout the numerous facilities on campus. By 2011, however, the decision was made to expand the use of the system to include the transport of blood products—which require heightened levels of safety and the ability to track their whereabouts. Because Pevco’s software could provide effective tracking of items and data to validate compliance, hospital administrators chose to upgrade to a Pevco system, beginning in May 2011.
The project initially focused on Penn State Hershey’s main hospital, where all 25 existing tube system stations were upgraded to Pevco stations. The stations are now supported by Pevco Smart Path™, the company’s traffic management technology. Each station now includes Pevco’s barcode tracking technology, which provides accurate and reliable tracking of both the carrier and its actual contents; not merely the container itself. This technology also tracks the sender and receiver of items through identification tags.

The Medical Center now has a Smart Path-driven, multi-zone tube system capable of handling 100 or more stations across multiple buildings.

In addition to improved tracking capabilities, Christine Kerr added that Pevco’s data retrieval technology is better than the technology of the old system. “Transaction data is critical for compliance reporting and process improvements. Pevco’s software makes it much easier to store and retrieve this critical information.”

Kerr also noted a major improvement in customer support since switching to a Pevco system. “Before Pevco, countless emails and phone calls would go unanswered. Although Pevco has hundreds of customers across the country, their team brings a level of attention and responsiveness that makes us feel like we are their most important customer.”

Carrier contents tracking, data retrieval and customer service are not the only benefits of the new Pevco system, according to Senior Systems Analyst Joel Sattazahn. “With our old system, the average transaction time was about three minutes, but thanks to Pevco Smart Path, that time has been cut to about 90 seconds.” Since the hospital currently performs about 1,700 transactions per day—and hopes to eventually grow that number to 4,000—Sattazahn believes the reduced transaction times will pay big dividends down the road.

While user benefits of the new Pevco pneumatic tube system are readily apparent, the facilities personnel who maintain the system are equally pleased. “Looking at mechanics alone, both our previous tube system and the Pevco system work,” said Matt Grimes, mechanics trade supervisor for Penn State Hershey. “But Pevco’s technologies provided the data reporting and transaction management capabilities we needed—and offered excellent customer service.”