

Medical Equipment Committee Improves Acquisition, Management

Jill Schlabig Williams

Subject: Bronx-Lebanon Health Center

Location: New York, NY

Size: Nonprofit, two-hospital system of 858 beds

Staff: 9-person clinical engineering department, outsourced to ARAMARK Healthcare

When Ayman Assanassios came on board at Bronx-Lebanon Health Center to manage the outsourced clinical engineering function four years ago, capital equipment acquisition was handled at the department level. No central committee reviewed or coordinated new purchases. Equipment evaluations were inconsistent, and technology planning was done on an ad hoc basis. The result? Equipment varied from department to department; and parts ordering, service, and user training were difficult.

As director of clinical engineering at ARAMARK Healthcare, Assanassios knew there was a better way. He launched an effort to create a medical equipment committee to ensure that all departments involved with equipment were on the same page. This included handling recalls and alerts, monitoring user error and physical damage, revamping the acquisition process, and improving technology management throughout the organization.

Challenge

“Since no committee coordinated medical devices, when it came to ordering equipment, the left hand never knew what the right was doing,” says Assanassios.

Since all new equipment was delivered to the clinical engineering department for inspection, Assanassios got a first-hand look at the disjointed purchases. “In the same week, we saw two departments order different makes and models

of blood pressure machines. It was tough for biomedical engineering to stock parts, tough for us to train people, and tough for the nurses who rotate among departments to transition to using different machines.”

Assanassios also saw other areas of technology management that needed better coordination, including management of equipment recalls and alerts and management of rental equipment. He was pleasantly surprised to get very little resistance to his proposal. “Everyone thought someone else was taking care of things,” he says. “When we pointed out what was going on, people were happy to change.”

His department reports to Hiram Torres, administrative director of support services for Bronx-Lebanon, who has been with the hospital for six years and recently began overseeing clinical engineering. It made perfect sense, Torres says, to regularly



Members of Bronx-Lebanon’s medical equipment committee (left to right): Frances Petersen-Fitzpatrick, Hiram Torres, Ayman Assanassios, Kevin Moore, Ricardo Melise, Idalyne Richards, and Morena Lasso.

pull together people from across the organization to focus on equipment issues. “Before Ayman put this committee together, there was a real gap in communication between the departments and the end users,” he says. “We would spend ten minutes in the Environment of Care committee meeting discussing medical equipment, and never really address problems we were having.”

Solution

Assanassios approached the then-director of environment of care, the vice president of nursing, and the assistant vice president of purchasing with his idea to start a medical equipment committee, and they all agreed that it was a good idea. He ultimately assembled a 10-person committee made up of representatives from nursing, medicine, radiology, labs, respiratory, performance improvement, purchasing, infection control,

and central sterile processing. He chairs the committee, which held its first meeting in January 2006.

All new equipment requests must now be reviewed and approved by the medical equipment committee. "We are 100% supported by the purchasing department," says Assanassios. "If anyone wants to buy anything, they must go through this committee."

The committee created a technology assessment process to evaluate equipment purchases. Using ARAMARK resources and its nationwide information network, says Assanassios, data are collected and spreadsheets are prepared to compare the specs, cost, and pros and cons of competing models. Users are always included in the evaluation process to ensure that new equipment will meet their needs. For many purchases, products from competing vendors are set up side by side and users evaluate the options and give their feedback to the committee.

In one of the committee's first meetings, it was discovered that two different departments were looking at purchasing new patient beds, and each was focusing on a different model. "We couldn't allow two different types of beds," says Assanassios. "There is a central bed repair room and beds are randomly pulled out as they are ready, so we would end up with different beds on the same floor."

Although each department was committed to its choice of a new bed, the committee put both models in the same room and had representatives from each department evaluate them, side by side. They discovered that one of the beds was sold with a \$1,600 built-in entertainment control system that would not have interfaced with the hospital's existing system. "By lining up the beds and having the nurses try them, we were able to reach a consensus," he says.

The committee also works to improve other areas of technology management. It advised the hospital to subscribe to ECRI Institute's online system for managing recalls and alerts, implementing a paperless system that directs alerts to affected parties and allows managers to monitor followup. To better manage equipment rentals, the committee implemented a rental equipment policy in which there is a list of preferred vendors that met a number of criteria and were authorized to bring equipment into the hospitals with only a visual inspection from users, eliminating delays associated with equipment coming into the facility on nights or weekends.

Results

Through the efforts of the medical equipment committee,

the facility has met its goals of standardizing equipment, improving capital equipment planning, and strengthening technology assessments. "Many of the things we are doing are not new," says Assanassios. "The difference is that before, they were done individually by departments. Now, with the committee, we address these issues as a group. We have created a common platform for all medical equipment users across the health system."

The new equipment acquisition process has been a great success. "Users are now very happy," he says. "The person who uses the equipment should have a say in what they get." There was, he admits, some resistance to the streamlined acquisition process from departments used to having autonomy over purchasing decisions. "Because of the committee, and its many goals related to equipment management, we were able to make them feel part of the team," he says. "People came to realize that this was a better way of doing things for the facility as a whole."

The clinical engineering department is also happy with the new process. Previously, clinical engineering would find out about new equipment only when they got a phone call asking them to check the incoming equipment. Now, they receive a copy of the purchase order when it is issued. This advance notice allows them to plan ahead for new equipment deliveries and ensure that equipment received meets the specs outlined on the purchase orders. Clinical engineering is also asked for input on contract issues such as length of warranty and training for biomed.

The committee can be credited with many other improvements as well. It is working to improve long-term capital equipment planning. It runs life expectancy reports on existing equipment and uses that data to schedule equipment for replacement. The committee is also working to track and address user errors, looking at root causes and identifying problems with equipment to address with manufacturers where necessary.

"Besides the cost savings we've achieved, the customer satisfaction improvement is unbelievable," says Torres. In fact, the medical equipment committee has been so successful that Bronx-Lebanon has now adopted the model system-wide, creating similar cross-functional committees for all seven management areas of the Joint Commission requirements. "This approach has taken our facility as a whole to a higher level," he reports. ■

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