Aurora Health Care's asset recovery program generates dollars, finds home for used equipment

Many hospitals in recent years have initiated programs to prevent used equipment from ending up in landfills as part of efforts to be better environmental stewards. For Aurora Health Care's 13 hospitals and more than 100 clinics across eastern Wisconsin, that effort is paying off in other dividends as well.

After establishing a central warehouse to inspect and refurbish the items and an eBay-like web site to market them, the hospital system is expected to recover more than $1 million through its Asset Investment Recovery (AIR) program, a full integrated cradle-to-grave approach to maximize the remaining value of unused or underutilized medical equipment.

As many as 450 pieces of used or outdated equipment arrive at Aurora's 10,000-square-foot warehouse each month. Located on Aurora's Burlington, WI, campus, the warehouse was a perfect solution because it eliminated outside storage expenses and freed up space used equipment was taking in other Aurora facilities.

Not only has the innovative program gained the attention of other major hospital systems, but also has earned Aurora two prestigious Supply Chain Innovation Awards from Premier, Inc. In June 2008, Premier honored Aurora Health Care and two other alliance members with its second annual Supply Chain Innovation Award for achieving successful innovations that have created new levels of performance and competitive advantage. Aurora was cited with two awards – one for the innovative centralized clinical engineering service model, and one for AIR, the program it spawned.

Weighing its options

Before the AIR program was established, Aurora, like most healthcare systems, exercised many options to get rid of used equipment; some was discarded, others were traded in, while others were "donated" to other hospitals or charities.

Knowing there had to be a way for a more reliable and consistent method, Aurora considered its options.

First, it recognized that getting rid of outdated or unnecessary medical equipment is not as simple as scheduling a trash pick up. Some devices can be repaired, upgraded, or reused. Others might find new life at another hospital. Still others could have value as replacement parts. "This is a challenge that

healthcare facilities and clinical engineering departments are facing," said Patrick Trim, director, Capital Equipment Services. "Patient safety is paramount, the impact on the environment is an ever-increasing concern and financial resources are increasingly limited."

Many healthcare providers rent a warehouse or use an offsite facility to store their unused assets with the hopes of someday having a renewed need for them. Others have a once-a-year sale, or attempt to donate the asset to other capital equipment starved healthcare facilities, either domestic or international. Others may choose to trade in equipment for pennies on the dollar, like Aurora had done in the past. According to Trim, however, these options not only generate additional expense, but also expose an organization to risk in terms of proper disposal and transfer of ownership. "The expense of maintaining a warehouse or conducting a "rummage sale" is adding cost to an already over-burdened healthcare price tag," Trim said. "Those managing the warehouse also often don't know the potential of what arrives on or leaves their doorstep."

And while there's always an assumption that recipients would sell or discard valuable/reusable assets, "we suspected that some items may not be disposed of in an environmentally friendly manner," Trim said.

Arriving at a solution

In retrospect, Trim was the perfect candidate for devising a solution to the problem of finding a suitable and profitable solution to the problem of discarding used or outdated medical equipment. As director of capital equipment services, Trim oversees capital acquisition, capital projects, and capital technology areas, IT procurement, as well as clinical engineering.

Trim: *"The popularity of this program has been astounding within Aurora. We are maximizing the value of each and every asset based on under utilization or end of life value."*

First, Trim knew he had the space to conduct the AIR program – a warehouse that had been recently vacated by distribution in order to set up their consolidated service center. The 10,000-square-foot warehouse on Aurora's Burlington, WI, campus was a perfect solution because it eliminated outside storage expenses and freed up space used equipment was taking in other Aurora facilities.

The most critical component of the program, however, was finding competent and qualified people to run it. And that's when he decided that the clinical engineering department would play a central role because of its expertise and knowledge of medical equipment.

The process essentially works the following way: once it is determined Aurora clinics or hospitals have no use for a piece of equipment, it is sent to the Burlington warehouse, which is manned by two biomedical engineers and a driver. As many as 450 pieces of equipment arrive at the warehouse each month.

Once inside, the equipment is analyzed by clinical engineering based on it's ability to be refurbished and re-deployed to another Aurora facility, harvested for parts internally, donated to a charitable organization, sold at auction, or disassembled and sold as parts to third-party vendors. All equipment undergoes rigorous testing and quality control checks before leaving the warehouse toward its final destination.

One of the most unique features of the AIR program is the web site Trim set up to allow third parties to view and acquire inventory. The site has the look and feel of the popular eBay auction site, a virtual shopping mall complete with equipment and parts photos. Parts dealers purchase most of the equipment, he said.

The program has become so popular, used equipment dealers are lining up to get on Aurora's approved vendor list and must be certified with Aurora by passing a series of qualifications that include their market position, whether they are an organized player that can afford to purchase the equipment, are large enough to indemnify Aurora, have the financial resources to handle any legal liability, and are reputable in terms of disposing of assets responsibly.

Trim said many of those who inquire about donations are physicians who do charity work overseas, and are looking for equipment that can be shipped to the country and location where they will be providing their healthcare missionary work. He added that Aurora also will be looking at other non-profit organizations that perform missionary work that act as the conduit between the healthcare facility in that country and the United States.

'Astounding' success

No one could be more pleased than Trim over the success of the program, which is projected to return approximately $1.3 million over the next two years against expenses of approximately $333,000. The expenses include personnel, administrative costs, transfer value, parts expense reduction, and utilities. One portable X-ray machine was recently auctioned off for $36,500 after being purchased nine years before for $150,000.

To date, only portable equipment such as IV pumps and ultrasound machines have been sold through AIR, but Trim expects larger devices such as CAT scanners and MRIs, as well as hospital beds, furniture and computers to be disposed of through the program within the next few years.

"The popularity of this program has been astounding within Aurora," Trim said. "We are maximizing the value of each and every asset based on under utilization or end of life value."

Because the AIR program is self-funded, available capital dollars for new equipment are not affected. And proceeds from the sale of equipment are credited back to the affiliate owner's cash balance. Despite the addition of the necessary staffing for the warehouse, the program will save Aurora money and reduce waste over time. "Part of Aurora's strategic plan is to develop ways to meet environmental challenges facing us today," Trim said. "This program fits that goal so that assets are now being recycled for re-use, for parts, or for scrap."

The clinical engineering supply chain centralization effort and Asset Investment Recovery Program also have caught the eye of prestigious hospital systems such as the Mayo Clinic and New York Presbyterian Hospital, which reportedly have visited Aurora to learn more about their program.

Trim said Aurora has entered into a developmental partnership with St. Croix system to co-produce the software used for the clinical engineering supply chain and AIR programs.

Aside from the huge financial success of the program, the AIR program would never have gotten off the ground had it not had Clinical Engineering integrated into the supply chain a feat that earned Aurora

another Supply Chain Innovation Award from Premier. Trim said AIR's unique structure has allowed Aurora to complete many initiatives that might not have been possible without clinical engineering's involvement. One of the first initiatives the team undertook was centralizing the clinical engineering function by bringing all clinical engineering activities in house. This allowed the clinical engineering team to provide increased equipment uptime. The team also went on to create a centralized system call dispatch center and in-house parts depots for high turnover/critical parts. These systems evolved into the creation of a self-maintaining asset management function, and an automated recall function for system notification of medical equipment alerts.

"It was very important to create a structure within Capital Equipment Services that supports these particular programs and has the ability to address the new and future innovations that we have planned," said Trim. "Centralizing staff and processes is more efficient. By incorporating Clinical Engineering Services into the supply chain, we can now use the centralized call center process to repair equipment quickly and increase patient satisfaction."

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