

Rubbermaid Medical Marketing

Case Study

King's Daughter Medical Center
Ashland, KY



Mobile Computing Cart Battery Exchange Program

Rubbermaid Battery Exchange program prevents unexpected power failure; ensures mobile computing carts are operational whenever and wherever they are needed.

Planned battery replacement of 220 carts at King's Daughter Medical Center was accomplished in less than four days, with minimal staff involvement and virtually no disruption to clinical care.

When one hears about the rapid deployment of technology in the clinical setting, discussion often focuses on the demands placed on physicians, nurses, technicians and other personnel. They are required not only to learn new and unfamiliar software, but also to adapt to new workflow processes and practice protocols.

Without a doubt, the transition to technology is challenging for clinical staff. But it has an equally significant impact on information technology departments. With every new system, every new piece of equipment, IT professionals must integrate, manage, maintain and support related soft- and hardware.

Battery Exchange program relieves IT burden

Recognizing that it needs to deliver value to IT departments as well as to nursing and administration, Rubbermaid Medical Solutions offers customers a battery exchange program. Supporting the placement of its mobile computing and medication carts in hospitals, the Rubbermaid Medical battery exchange program (BX) preempts power source failure that could inhibit care delivery and overwhelm IT staff with urgent demands for service throughout the hospital.

King's Daughter Medical Center (KDMC) in Ashland, Kentucky, purchased 3 Battery Exchanges with their initial cart purchase. In 4 days last spring, they redeemed their first BX Cycle and had batteries exchanged on the facility's 220-cart fleet. Rubbermaid Medical service technicians completed the work with oversight by a single KDMC IT staff member, and carts were absent from their units less than 10 minutes each.

A 385-bed nonprofit facility founded in 1899, KDMC chose to adopt Rubbermaid Medical carts in February 2008, purchasing 100 M38-model computing carts for use in various units. In December of that year, it implemented an additional 120 M39-model medication carts. Nursing was thrilled with the selection because the product was light-weight and easy to maneuver, and because it offered features like enlarged work space and keyboard lights to make their jobs easier.

Just as importantly, IT staff was pleased with the service plan that backed the carts. "The fact that Rubbermaid Medical offered the battery swap was one of the reasons we chose the carts," says David McDonald, Systems Administrator at KDMC who served as Helpdesk Manager during the Rubbermaid Medical purchase. "When you have as many carts we do, the support and maintenance is a significant job."

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David McDonald,
Systems Administrator

Rubbermaid Medical computing and medication carts are powered by sealed lead acid batteries (SLA). The natural life cycle of SLA batteries – rounds of complete charge and discharge – is typically 10-14 months. Run time diminishes as the batteries age, from eight hours, to six hours, to four hours and so on. This means that carts installed within a single timeframe often begin to experience battery failure at about the same time – putting significant pressure on IT staff to keep the fleet up and running.

"It can be a challenge," admits McDonald. "A hospital might not have enough replacement batteries on hand and may lack the staff to instantly replace batteries on various floors and units."

Facility-wide exchange completed within three days

The BX is structured so that, when 15% of a facility's batteries have experienced diminished capacity, Rubbermaid Medical staff initiates a scheduled maintenance visit to exchange all batteries in the fleet. A field engineer is assigned to the project, and he or she assigns the appropriate number of service technicians to ensure the project is completed quickly and with as little disruption to clinical care as possible. Rubbermaid Medical delivers new batteries – often by the pallet-load – to the facilities shipping dock so that all equipment is on hand when the exchange begins.

KDMC chose to initiate their first battery exchange cycle after only 10% of failure. On a fleet the size of KDMC's (220 carts), even 10% fleet failure meant IT staff was using valuable time to replace more than 20 batteries. Once KDMC requested early initiation, three Rubbermaid Medical service representatives were onsite within 2 weeks, hosted by Greg Howard, KDMC technical support analyst, who guided the crew from unit to unit. Prior to the service, a planning conference call was held between Rubbermaid Medical and KDMC to coordinate all parties, including nurse manager notification about the window of time when carts would be temporarily out of commission. As the crew arrived at the unit, all carts were unplugged and rolled to a quiet spot down the hall. Failing batteries were quickly removed, new units installed and the carts were back in service at their proper location within 10 minutes. In the first three hours, the Rubbermaid Medical team exchanged batteries in 47 carts in the IT department and seven units.

Program sets Rubbermaid apart from competitors

The implementation of Rubbermaid Medical carts in 2008 resulted from a joint decision-making process that involved administration, nursing and IT leadership. According to McDonald, four vendors were considered. Two made the final cut, but Rubbermaid Medical edged out the competition because of its superior product and service plan.

Because nurses are assigned four to six patients, KDMC sought a cart that would be light-weight and easy to move. It also wanted to reduce physical strain on the nurses by minimizing the trips between patient rooms and the central medication dispensary where possible. The Rubbermaid Medical models met all these criteria and offered more surface space for a laptop with a larger, 17-inch monitor, as well as additional space for nurses to set supplies or paperwork. While another cart system offered similar features, the decision was clear when KDMC learned about the BX.

The contrast with the vendor that came closest to Rubbermaid Medical in terms of service and support was significant, says McDonald. "The other company would provide us with 10 batteries to have on hand if any carts failed," he explains. "We would have to keep ordering more as we needed them." This was problematic because KDMC did not have room to store the extra batteries, which weigh about 50 pounds each, nor the staff to manage inventory and physically replace failed units. Staff also needed to track replacement dates on each unit so it could monitor the life of each battery and be prepared for imminent replacements

In addition, the replace-after-failure approach left nurses and patients short on computing carts. "When a battery was depleted, the cart couldn't be moved about," notes Howard. "The nurses would be frustrated because information they needed was unavailable and they couldn't get patient medications out of the drawers."

The Rubbermaid Medical cart system also provides power alert software, which alerts IT staff when individual carts have reached 50% charge. KDMC pulls up a report on the fleet each Friday afternoon, and identifies each cart that needs recharging. IT staff can either call the nursing unit to request the cart be plugged in or walk around and do it themselves. "This allows us to be proactive in our power management efforts," says Howard.

The KDMC IT department is not alone in its satisfaction with the Rubbermaid Medical carts. "The carts are very convenient," says Karen Moore, RN, Heart and Vascular Surgery, noting that the nurses appreciate the fact they are not heavy and that the medication drawers automatically lock after two minutes. "The carts allow us to face the patients when we are charting, which they appreciate. With the Rubbermaid Medical carts, the computer doesn't end up being a 'barrier' between the nurse and the patient."

Moore adds that the reliability of the carts' power source is vitally important. "Our computer and some of our equipment like scanners draw from the cart battery. It's reassuring to know that we can count on everything running when we need it."



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Karen Moore,
Registered Nurse



Consistent, pro-active, full-fleet replacement of batteries will maximize up-time while minimizing resources and user frustration



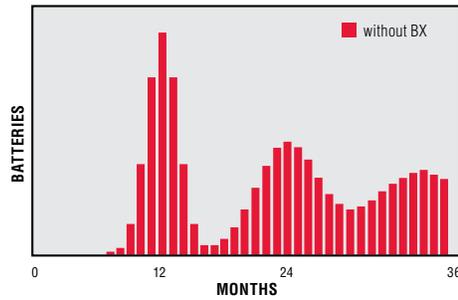
SKU NAME

- 9M38-BX-A55 - 1 Cycle Battery Exchange for 9M38 Product line with 55 amp battery
- 9M38-BX-A35 - 1 Cycle Battery Exchange for 9M38 Product line with 35 amp battery

PRODUCT SPECIFICATIONS

- 115% of fleet batteries exchanged
- First 15% of fleet failure is responded to with next day delivery of new battery
- After 15% of fleet has been replaced, RMS initiates a fleet exchange with the customer
- During fleet replacement, 100% of fleet is replaced with RMS technicians on-site
- 4 week lead time for fleet exchange
- Minimum order: 25 carts
- Up to 3 Exchange Cycles may be purchased per cart
- New 90 day warranty applies after fleet exchange

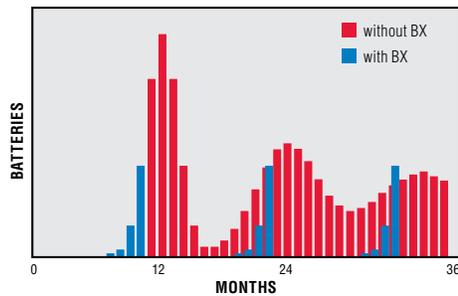
Batteries Replaced by Hospital Staff After Cart Deployment



EXPERTISE IN BATTERY MANAGEMENT

- RMS understands that battery life span variations lead to user dissatisfaction and IT burden
- Long term life span variation requires daily battery support

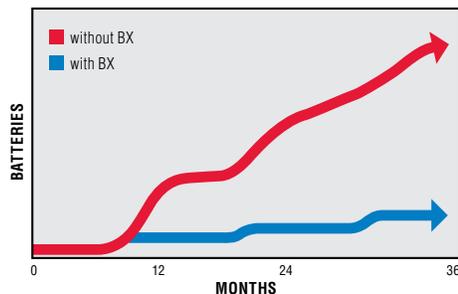
Batteries Replaced by Hospital Staff After Cart Deployment



BATTERY MANAGEMENT SIMPLIFIED

- Battery life span variations are accounted for with a full fleet replacement at 15% failure
- Following fleet replacement, daily battery support requirement ceases

Cumulative Batteries Replaced by Hospital Staff After Cart Deployment



MINIMIZE RESOURCES: MAXIMIZE SATISFACTION

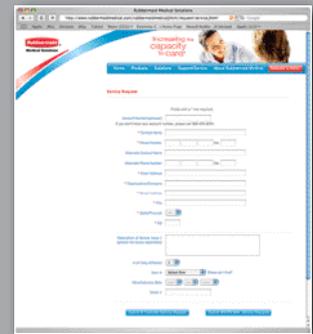
- Battery Exchange results in an 84% reduction in labor and is complemented by sustained user satisfaction



SERVICE GUARANTEE

We are committed to providing best in class service to maximize your uptime. Our service guarantee includes:

- Onsite Parts/Service next business day as needed
- Call back within 2 hours
- Help desk support
- Dedicated Technical Account Manager and Field Engineer



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