

## **Quality Management for a Nationwide Rental Fleet of Biomedical Equipment**

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A fleet of ~210,000 ventilators, IV pumps, monitors, and other moveable critical-care devices from various manufacturers is available for rental by American healthcare providers. This equipment is delivered around the clock, usually within 2-4 hours of request, by 106 branches covering all 50 states. A PC in each branch and a central computer are used to track each device identified by a barcode tag. Simple repairs and PMs are performed in branches by qualified biomedical technicians; more extensive repairs are performed at three service centers strategically located. To ensure safety and performance, a comprehensive quality management program has evolved. Each unit is inspected before delivery, no matter how recently it was inspected before. Recalls and patient incidents are centrally managed and documented, even if performed in the field. Equipment serviced at service centers and service reports filed by every biomedical technician are audited by a dedicated staff. In addition, service quality is also monitored when equipment is transferred between branches and rented to customers. A complaint system follows up on any reported problem. Some of the indicators used to identify opportunities for improvement are: a) number of problems found in audits, b) number of confirmed problems reported within 7 days of delivery, and c) number of confirmed problems per hundred units delivered. Branch compliance to the quality program is further reinforced by unannounced random on-site visits. This stringent quality program provides the users with the confidence that the equipment is safe and can be used immediately on a patient.