

## EQUIPMENT MAINTENANCE APPLICATION NOTE

*AeroScout's Equipment Maintenance Solution Improves the Daily Processes of Clinical Engineers, Providing Improved Regulatory Compliance, Improved Patient Care and Reduced Labor Costs*

### CHALLENGES

Patient equipment must be regularly maintained in order to have highly functioning equipment for quality care. The Joint Commission (formerly JCAHO) helps assure this goal by completing an audit of the hospital's equipment maintenance records every three years plus unannounced audits. Failure to meet The Joint Commission regulations may ultimately result in denied reimbursement for Medicare and Medicaid claims.

The clinical and biomedical engineering team that maintains the equipment is faced with the labor intensive process of locating the equipment to be maintained. Often when the equipment is finally located, the clinical engineer is not able to remove the piece of equipment because it is in use or scheduled for use. Additionally, many pieces of equipment are never located and are considered lost or stolen.

### SOLUTION

AeroScout features an Equipment Maintenance solution as part of its industry leading healthcare visibility suite, which uses a ubiquitous, standard Wi-Fi infrastructure to deliver a wide variety of benefits throughout the hospital.

The hospitals mobile equipment assets (i.e., infusion pumps, portable weight scales, oxygen regulators, patient transport trolley's, defibrillators, vital sign monitors, etc.) are tagged with AeroScout's Active RFID Tags, and the location of each tagged piece of equipment is noted on a map of the facility in AeroScout's MobileView software. The clinical or biomedical engineer can also note the required preventative maintenance interval (i.e., annual, quarterly, monthly, etc.) and date in the software.



The status of the equipment can be determined through several means, to understand if the equipment is available for maintenance. Staff can use the call button on the Tag to indicate equipment is ready for maintenance. AeroScout's unique Exciter choke-point technology tracks when a piece of equipment enters or leaves an area, or even the facility, and alerts staff in order to reduce lost and stolen equipment. The alert may also indicate that the equipment has been placed in an area, where it is now available for maintenance. Alerts may include e-mails, a pop-

up window in MobileView, a page, a VOIP phone or badge alert, a text message or other forms of alerts.

The staff can now pull up a report in MobileView to understand the location and status of equipment that needs preventative maintenance. The system's standard reports include real-time location and status reports based on search criteria such as asset type, name, location and status. All of the reports can be exported to Excel, Adobe Acrobat, XML, or printed directly from MobileView.

MobileView location and status data can be integrated into existing asset and maintenance management hospital information systems. A biomedical software system can pull the location and status data from MobileView into the software to be viewed in the biomedical system and maintenance information (i.e., equipment maintenance dates) can also be uploaded to MobileView from a biomedical system. In addition, as assets are tagged in the hospital, they can be added into MobileView directly from the biomedical software or simply by scanning them with an integrated barcode PDA, enabling the clinical engineer to work with a single user interface.

Assets and equipment location can also be viewed on a PDA, which can be beneficial during equipment pick-ups as location information may change after the biomedical or clinical engineer has run a location and status report from a workstation.

## **BENEFITS**

- Improved regulatory compliance with The Joint Commission through higher levels of on-time completion of equipment maintenance
- Reduced equipment search times
- Improved workflow for clinical engineers who now understand the status of the equipment to be maintained, eliminating searches for equipment that are not available for maintenance
- Improved patient care through improved equipment quality and the additional time clinical and biomedical engineers spend with the equipment as opposed to searching for the equipment
- Reduction in lost or stolen equipment, reducing the amount of time spent searching for equipment that is no longer in the facility

### Sample Cost Justification- Annual

- Unnecessary equipment search labor costs: \$75,000
- Location of pieces that cannot be removed due to unknown equipment status: \$12,500

AeroScout is the leading provider of Wi-Fi-based Active RFID solutions. For more information about our healthcare visibility suite of solutions, please call (650) 596-2994 or visit [www.aeroscout.com](http://www.aeroscout.com).