

Asset Tracking in the Healthcare Environment – An RFID Case Study

A large, urban healthcare facility was challenged by the length of time it took to locate high-value medical assets, as well as to manage the maintenance of that equipment.

The facility has over 7500 employees, including 500 physicians, and has annual admissions of 40,000+, 90,000+ ER visits, and 30,000+ surgical procedures. Too much time was being spent searching for life-saving medical equipment. The majority of the assets are owned by the healthcare facility; however some higher value assets are leased from outside equipment providers that require maintenance management programs. RFID **AssetTrack** from Stratum Global® was deployed to track assets and manage asset maintenance, providing this healthcare facility with an optimal level of visibility.

The facility is divided into zones, based upon materials used and the volume of traffic within each area. Using this information, it was determined that active and passive RFID tags would be deployed in the emergency room, and assets in pediatrics, cardiology, oncology and obstetrics would utilize passive technology and read points exclusively.

In the emergency room, human assets are vital and the importance of communications, visibility, accessibility, and consistency are essential. Originally, the hospital utilized pagers as a way to communicate with physicians, however, with the current legal climate and ER overcrowding, improving response time was critical. Having real-time visibility to physician location enables the administrative team to make immediate decisions and improve patient response time. By incorporating an active tag into their existing employee identification, physicians broadcast location details to the beacons throughout the department. The data is collected and funneled through the network based on a preconfigured schedule (i.e. every 20 seconds, every 30 seconds, etc.) Kiosks are placed within the department (password driven and secure) and at any time a search can be conducted based on last name, id number, medical specialty or other criteria that the hospital determines.

In other areas of the hospital, passive technology is deployed to manage capital assets. Read points are determined throughout each department. Assets are tagged with passive, reusable RFID tags. As assets move throughout the department, data is collected and logged. Using the tags, information is recorded regarding maintenance schedules and any relevant information that needs to be recorded. When an asset is needed, the information about the locations is readily available via a browser-based interface on any network device. Assets that do not move (example, a CAT scan unit) are tagged for maintenance purposes as well.

Phase 2 plans include scaling the solution to other departments, using identification RFID tags for patients at admissions to track throughout the entire organization, and tracking movement of sensitive materials and documents.

For more information on *AssetTrack*, please link to:

<http://www.danbygroup.com/systems/documents/DanbyAssetTrackOverviewJune2008.pdf>