

Healthcare Asset Tracking

Company profile

This proof of concept project was done for a large urban healthcare facility encompassing 500 employed physicians and 7000 employees (non-physician), having an institutionalized stage for almost 90,000+ Annual Emergency Room Visits that can tackle 40,000+ Annual Admissions and 30,000+ Annual Surgical Procedures.

Business situation

Their internal objective is to eliminate time spent for locating lifesaving assets and managing maintenance of equipment(s).

Solution

- Sameva as a technological partner with Stratum Global, a leading RFID solution provider, came up with an Active & Passive Tagging Solution which was strategically well placed at feasible read points around the perimeter of inventory area, using reusable tags, RFID Readers and antennas.
- Have projected an approach that enabled Integration with their existing inventory management system.
- System alarms to notify discrepancies.
- Seamless and advanced data collection reporting and event management.

Using both active and passive tags within the same environment to track assets and manage asset maintenance provides this healthcare facility with an optimal level of visibility. 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. 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 tags would be deployed in the emergency room and assets in pediatrics, cardiology, oncology and obstetrics would utilize passive technology and read points exclusively – Phase 2 includes plans to scale out to other departments.

In the emergency room, human assets are vital and the importance of communication, 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 emergency room overcrowding, improving response time is 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 beacons throughout the department. The data is collected and funneled through the network based on a preconfigured schedule (i.e. every 20 or 30 seconds, or whatever the case may be). 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 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: CAT scan) are tagged for maintenance purposes as well.

Benefits

- Instant visibility to physicians within the Emergency zone via kiosks
- Ability to find and sort physicians based on medical specialty, etc.
- Improved patient response time
- Asset maintenance management logs
- Improved access to vital equipment
- Plans to scale to the solution to other departments
- Identification RFID tags will be used for patients at admissions to track throughout the entire organization
- Tracking movement of sensitive materials