



Hospitals Manage Assets More Efficiently And Speed Up Inventories With RFID

ABOUT MEDICAL PARK HOSPITALS GROUP

Medical Park Hospitals Group is Turkey's largest private hospital group. It was founded in 1993 with the aim of providing quality healthcare services to all parts of society. The group has continued to grow and now has 22 hospitals spanning a total interior area of 428,500 m² in 15 cities throughout the country. It has 166 operating rooms, 3,506 beds and over 11,000 employees.

Challenge

Medical Park Hospitals Group was deploying too many resources on trying to keep track of its medical equipment. It used a combination of a physical paper-based inventory systems and basic barcode tracking. However, with an average of 5,000 biomedical assets per site, a full inventory count would often take each hospital between six to eight weeks. By the time staff had finished, data was no longer up-to-date, items had been moved to different

parts of the hospital and it was time to start the next inventory cycle. In a few departments, such as Operating Rooms (OR), Intensive Care Units (ICU) and Emergency Departments (ED), teams have to run two inventory counts daily, which would take one member of staff around 90 minutes per count. Processes were time-consuming and often lacked accuracy, which could lead to poor asset management, over purchasing or renting.

Medical Park decided that it was time to increase the visibility of its assets, starting with its high-value biomedical assets. And, following a series of presentations, demonstrations and pilot projects it chose Zebra Technologies' partner Borda Technology to deploy its RFID Asset Management solution. Borda Technology is a specialist in RFID solutions for healthcare, investing heavily in R&D at its laboratories in Europe and America and delivering turn-key solutions including site assessment, installation and training.

SUMMARY

MEDICALPARK

Customer

Medical Park Hospitals Group, Turkey

borda

Partne

Borda Technology

Industry

Healthcare

Challenge

Medical Park Hospitals Group sought to install a thorough asset management solution across its sites

Solution

- Zebra FX9500 fixed RFID readers
- Zebra MC3190Z RFID handheld readers
- Zebra RZ400 RFID printers
- Zebra OneCare 3
 year extended warranty
 contract
- Borda Technology's Lighthouse software

 RFID fixed asset management and asset protection management

Results

- Previous inventory counts took 6 – 8 weeks; new solution takes 1 – 2 days
- Improved accuracy of inventory
- Enhanced asset utilisation
- Increased staff productivity
- Reduced over purchasing and rental costs
- · Better loss prevention
- Rapid ROI



Solution

Medical Park has now deployed Borda's Lighthouse passive RFID based asset management and asset protection management software and RFID readers and printers from Zebra Technologies at five of its hospitals in Istanbul. It started tracking its biomedical equipment, but it now also tracks IT assets and furniture. The solution will be rolled out to the remaining hospitals across Turkey this year.

Firstly assets are tagged with RFID tags. Tags have been chosen from several suppliers and are suitable for healthcare – they are impervious to hospital disinfectants – and have an IP68 rating. The Zebra RZ400 RFID printers are used to print and encode the tags. Assets are then initially registered or imported to Borda's Lighthouse platform and synchronised with the Zebra handheld RFID readers.

Later, when hospital staff scan a piece of equipment with the Zebra MC3190Z RFID handheld readers (no line of sight is required), details about that item and its assigned location come up on screen. Teams can also cross check maintenance and calibration information and manage service requests and repairs via Borda's Lighthouse asset protection management software. On search mode, staff can search

rooms for a specific asset, such as an infusion pump. Borda has also installed Zebra FX9500 fixed RFID readers and antennas throughout the hospital creating zones for tracking the assets in zonal level and in the ceilings at hospital exits, so a real-time alert is triggered when a piece of equipment leaves the premises.

Data is synchronized back to the hospitals'
Lighthouse software and the Lighthouse
middleware translates and compiles the raw
data, turning it into usable format. For example,
it allows reports to be generated on asset
utilisation and loss prevention. Lighthouse is also
fully integrated with the hospitals' information
systems, so all requests relating to assets can be
managed through the standard systems.

Results

Hospital managers now have a much-improved overview of assets and can utilise and allocate them more effectively, to ultimately improve patient care. Costs associated with over purchasing or unnecessary rentals have been slashed and levels of lost or misplaced equipment have reduced dramatically. Fixed asset inventories are very quick and straightforward; the results are highly accurate and staff productivity has improved. In the OR, ICU and ED departments, the twice daily inventory counts of around 250 assets now only take about five minutes, which means the staff can spend more time on patient care. Lighthouse's user interface is simple and visual, with colour-coded maps showing the location of assets. And the automatic generation of reports has significantly reduced administration and paperwork. Zebra OneCare protects Medical Park's investment and eliminates hardware replacement costs. In the future Medical Park may increase RFID usage in its hospitals to include tracking of, for example, patients and medication.

"Full inventory counts used to take a team up to eight weeks per hospital. Now one person can do the same job in one or two days, with highly accurate results. We can now effectively track asset utilisation too, which helps us better manage equipment deployment between sites and save costs on rentals and over purchasing. We are very pleased with the quality, performance and durability of the Zebra hardware, which is further supported by a Zebra OneCare extended warranty contract."

Ahmet Usta,
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Strategic Planning,
Budgeting and
Analytics, Medical
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Group

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