



## SUMMARY

### Customer

A Dutch hospital group

### Partner



Mobile IT

### Industry

Healthcare

### Challenge

The hospital group wanted an efficient, safe way of moving patients around its hospitals. The solution had to be a multifunctional tool which could be adapted to patients, goods transport, cleaning through to inventory management, all on one type of scanner.

### Solution

- Zebra TC55 Touch Computer
- Zebra HC100™ Wristband Printer
- Zebra Z-Band® Ultrasoft Wristbands
- SOTI® MobiControl
- ARTA Hospital Suite Software
- Zebra OneCare three-year comprehensive coverage

### Results

- Over 130,000 orders monitored using Zebra's TC55s last year, including 65,000 patient movements
- Significant time and resource savings
- Improved porter productivity and job satisfaction
- Robust, ergonomic devices with excellent battery life and wireless connectivity options
- Solution that is easy to use and manage
- Exceptional feedback at both user and managerial level
- Having a single device facilitates training, management and maintenance
- Easy, secure remote management via SOTI MobiControl
- Zebra OneCare ensures optimal device uptime and a longer device life cycle

# Dutch Hospital Group Deploys Solution From Zebra Technologies For Patient Transport

This Dutch hospital group is known for providing high quality care to a large number of inhabitants in north-west Netherlands. The group is leading the way in the medical sector, aiming to always provide the highest possible quality of care for patients and optimal working conditions for staff, whilst increasing efficiency and safety with scalable solutions to support its growth.

## Challenge

The group has been using solutions from Zebra Technologies at its sites for many years: recently, for example, Zebra MC40 Mobile Computers for patient movements and Zebra HC100 Wristband Printers together with Z-Band Ultrasoft Wristbands for patient ID. (It was the first hospital in the Netherlands where barcoded wristbands were scanned to identify patients.) However, the group did not have an effective method for assigning orders to porters and cleaning staff or moving patients around the hospitals. It decided to equip staff with a device to receive orders digitally and with which they could scan patient wristbands, as they collect and deliver them to their destinations. In this way porters could be deployed efficiently and patient whereabouts could be tracked and monitored in real time.

The group approached its long-term partner Mobile IT to discuss suitable handheld devices for the project. Mobile IT has years of experience providing mobile enterprise solutions for the healthcare, security and logistics sectors in the Netherlands. It works in close collaboration with its clients, providing fully integrated, tailor-made solutions. Mobile IT arranged a field test for the group, during which users tested devices for ease of operation, robustness, reliability, scanning performance, battery life and wireless connectivity. The Zebra TC55s came out on top.

## Solution

Patient transport around the hospitals is now managed by ARTA Hospital Suite Software running on Zebra's TC55s. Departments commission transport orders, which are then displayed on a monitor in the hospitals' central waiting rooms and on-screen on the TC55s. Each porter accepts a transport order directly on the TC55 and scans the patient wristband to ensure the right patient is being transported to the correct location.

On acceptance of the assignment, the transport order changes status and colour on the monitor and on the TC55, so ensuring absolute process clarity; once the patient is safely delivered, the transport order is finalised on ARTA, which, in turn, links to both the Electronic Patient Dossier (EPD) and the hospital's Enterprise resource planning (ERP) system. The entire process is self-managed, automated, wireless and requires no dispatcher, paperwork or verbal instructions. The software is centred on self-management, so porters can choose assignments and determine which route will be fastest, for example. The combination of technology efficiency and human insight offers many benefits, with porters remaining motivated, whilst the hospitals can easily drive efficiencies to meet KPIs. Moreover it is important to the group that automation should not make the process impersonal for the patient. Therefore it has selected noiseless scanning of the barcode and porters still give as much, if not more, attention to the patient they are transporting, as they are not having to check paperwork and can work quicker and more efficiently.

Having seen the success and benefits of this deployment, the group is now using this same solution for changing beds and cleaning operating and isolation rooms.



The beds have barcodes and a notification comes up on the TC55s when it's time for maintenance or cleaning. Moreover, wanting device uniformity for ease of management and maintenance, and realising the flexibility and potential of the TC55s, the group has replaced its fleet of Zebra MC40s with the TC55s and uses them for a multitude of processes, such as freight transport, inventory and inventory management, making up beds, cleaning isolation and operating rooms and maintaining nursing aids.

Mobile IT hosts version 13 of SOTI MobiControl for the group. Via SOTI it can remotely manage the device and even remotely assist users. Updates and latest configurations, once fully tested, are pushed out to the TC55s in the evening. Managing the mobile fleet this way only requires an hour every week and enables scalability. The group also has a three-year comprehensive Zebra OneCare package for the TC55s, to ensure a longer guaranteed life cycle and optimal device uptime.

## Results

Each month thousands of jobs are processed using Zebra's TC55s. The solution has allowed the group to achieve enormous efficiency and increase the quality and safety of its service. Patient journey times have been shortened, as porters can collect the patients closest to them in the hospital whilst on the move and self-manage their schedule and route to be as effective as possible. This has increased both porter productivity and job satisfaction. Beds are now cleaned within 2 hours of receipt of order and operating beds within 15 minutes. Moreover a staggering € 20,000 has been saved on hot meal catering, thanks to the improved patient traceability. Feedback has been excellent, with users praising the TC55's battery life, high-performance scanning, ergonomics and lightness, robustness, reliability and wireless connectivity. With the optional SIM card for continued 3G connectivity, patients can be transported easily to other buildings and locations, even in areas with little or no network coverage. Looking forward, the group will continue to automate further processes, for example the transport of goods such as linen, medical gas and blood supplies between sites. Nursing aids, such as anti-decubitus mattresses, will be linked to a patient record, so they can be automatically retrieved after patient discharge, which in turn will generate a bed cleaning order via the EPD. Packet scanning will also be introduced for internal logistics goods traceability. This will involve further deployments of the TC55 and potentially other solutions from Zebra and iARTA.

“We are delighted with the collaboration with Mobile IT, Zebra and iARTA. They have worked seamlessly together to provide us with a sole point of contact in case of issues. And they have delivered an optimal turnkey solution: when we receive a TC55, all we need to do is unpack it, scan two barcodes and the TC55 running ARTA is immediately fully operational. The TC55 itself is a robust, professional scanner, light and comfortable to hold. Our porters love the long battery life and the high-performance scanning. The solution is saving us time and money. More importantly, our porters can work more efficiently and patients are transported more safely, freeing up care workers time. We've used Zebra devices for a long time now and know they are always reliable and user-friendly.”

### Dutch hospital group

For more information, please visit [Zebra Technologies](#)



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