

CASE STUDY

ARUBA CREATES PLATFORM FOR INTEGRATED APPROACH TO HEALTHCARE EXCELLENCE AT DUTCH HOSPITAL



Canisius Wilhelmina Hospital (CWZ) is a healthcare provider, based in Nijmegen, eastern Netherlands. It employs 4,000 staff and serves 250,000 patients each year. Increasingly, its remit extends beyond the Nijmegen campus.

“Our focus is on provisioning the right type of care at the right location,” says Stef Mentzel, Manager Medical, Information & Communication Technology, CWZ. “We attach great value to working in cooperation with regional healthcare partners such as GPs, academic centres, home care and care homes.”

SEAMLESS ACCESS TO PATIENT RECORDS

Central to this integrated approach is the implementation of a new Electronic Medical Records (EMR) in 2017.

“Patient information has to be available in the hospital and our other sites as well as for cooperating health care professionals which provide treatment and services to these patients,” says Mentzel. “This information is vital if we are to deliver the best healthcare.”



There are also political considerations to make this happen. Netherlands law requires patients to be able to access their medical records by 2018. By 2020 patients should be able

REQUIREMENTS

- Consistent, on-demand wireless access across multiple hospital sites
- Ability to track and manage usage across 400-acre campus
- Simplify management of access requests
- Enable structured secure network access policies
- Accommodate high-bandwidth spikes in network demand
- Create a platform to support long-term healthcare innovation

SOLUTION

- Aruba 7200 series mobility controllers
- Aruba 802.11ac Wave 2 APs
- Aruba Mobility Controllers
- Aruba ClearPass Policy Manager

BENEFITS

- Comprehensive network coverage across central and multiple hospital sites Load balancing to soften spikes in demand
- Secure access based upon appropriate authorizations

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STEF MENTZEL

MANAGER MEDICAL, INFORMATION & COMMUNICATION TECHNOLOGY, CWZ

to decide for themselves when and where to share this information.

Mentzel says: “The Dutch government is giving us the resources to facilitate, but it’s up to us to make it happen. If we’re not ready, we risk losing our accreditation.”

Developing a strategic network vision

The CWZ network, says Mentzel, was not fit to support the new EMR: “Our core network was quite obsolete. Wireless penetration had grown, but rather through user demand than a central, strategic push. We had 200 wireless access points across the campus, which was not enough for sufficient coverage and to support the services we wanted.”

Mentzel joined CWZ in 2014. One of his key objectives was to develop and implement a comprehensive, campus-wide

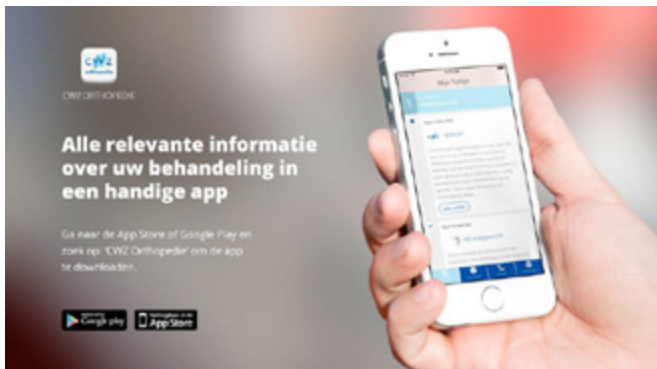
wireless strategy. "Information is the business case, but it was clear there would be dozens of secondary, beneficial use-cases."

SECURE AND WIRELESS ACCESS

CWZ worked alongside Aruba and SecureLink to create the right solution.

"SecureLink is a renowned security partner," says Mentzel. "It has a proven track record in designing and implementing secure network access, and providing ongoing support. We're convinced we have selected the best solution for CWZ hospital and are looking forward to provide secure and wireless network access for all our healthcare professionals and patients."

The Aruba solution consists of 800 802.11ac Wave 2 access points, plus three Aruba 7200 Series mobility controllers. In addition, 1,500 ClearPass Policy Manager guest licences allow for guest access to the network.



Once complete there will be 900 access points across the CWZ campus. Coverage will include the main building and four smaller buildings. Mentzel says future plans may include outdoor access points to link the pathways and public spaces between buildings.

"Naturally, secure access to our hospital network is an important issue," says Mentzel. "In the Netherlands we have to report each and every breach of patient data confidentiality, so a lot of effort is directed at preventing breaches of patient confidentiality."



A platform for continued development

"Although the network refresh is driven by the introduction of our new EMR, we'll employ a strategy to use our wireless network more and more," says Mentzel.

The next step is to connect a variety of devices that use data to interact. This includes telephony, smart devices used by our healthcare professionals, medical devices and non-medical devices.

"The improved availability and coverage of our new network will allow our staff to be increasingly mobile in their work," says Mentzel. "For instance, at the moment our nurses work with medical 'computers on wheels' but the combination of our new EMR and network refresh will also make it possible for them in the future to work from smart devices. I'm confident this will massively improve the quality and efficiency of their day to day work."

"The availability of a good wireless network will allow our healthcare professionals to work from multiple devices at the bed side. In addition, our network refresh will improve services for our patients ranging from patient entertainment and improved patient monitoring in the clinical setting to internet access and location services in the outpatient setting."