

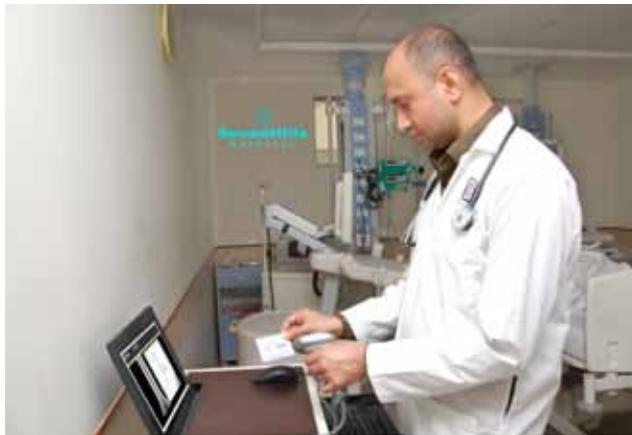


SevenHills Hospital Aided by Ruckus: Dispensing First-Class Healthcare to Over 1500 Patients

When SevenHills Hospital first opened its Mumbai doors in 2010, the state-of-the-art facility employed a pioneering range of ICT solutions to support its vision of providing first-class, affordable, patient-centric healthcare.

One of the key technology solutions invested in by SevenHills Hospital has been their Wi-Fi network from Ruckus Wireless, which has allowed the 1500-bed hospital to deliver India's first truly paperless healthcare facility.

Doctors and clinical staff are equipped with laptops and computers-on-wheels to update and view medical records, providing clinicians with access to up-to-the-minute patient information, including large image files such as CT scans, thereby increasing the window of availability and effectiveness of bedside consultations.



Ubiquitous Wi-Fi coverage at SevenHills Hospital enables clinicians to achieve 100% paperless data collection. Real-time access and capture of patient data, test results, medical records and other life-critical information accelerate patient evaluation efficiency and improve diagnostic accuracy.

The hospital complex is comprised of 16 interconnected multi-storey towers. The campus itself covers over 17 acres, housing the hospital complex and 300 residential apartments for staff.

With a built area totalling more than two million square-feet, SevenHills Hospital's choice of Ruckus Wireless for its Wi-Fi network has enabled wireless access from every part of each building for their clinicians, patients and guests.

Before the hospital opened, the challenge of selecting the right Wi-Fi network for the hospital was handed to Suresh Kumar, SevenHills Hospital's General Manager of IT. After consultation with industry specialists, Suresh found himself weighing up solutions from Ruckus, Cisco and Aruba.

Suresh's team set about trialling the offerings from the three different vendors, streaming video from the operating theatre to a separate building within the hospital complex.

"Our objective was to identify a wireless solution that could deliver services with the speed of a wired network; even with bandwidth intensive applications like video streaming," advises Suresh.

"There was no disturbance in the transmission when we trialled the Ruckus ZoneFlex AP. The interference avoidance and video QoS features of the product were exceptional," Suresh concludes.

As the wireless network trial continued, Suresh's team uncovered additional features of the product that cemented their decision to select Ruckus for the hospital.

COMPANY OVERVIEW

SevenHills Hospital is part the SevenHills Group, which has over 25 years experience in the healthcare sector. With a campus size of 17 acres, multiple buildings and 1,500 beds, SevenHills Hospital Mumbai is a state-of-the-art medical facility and the largest hospital in Asia.

REQUIREMENTS

- Complete signal coverage to 16 multi-storey hospital buildings, residential apartments, and outpatient facilities.
- High throughput and speed to allow viewing of CT Scans on demand
- Superior video streaming support
- RF Interference avoidance
- Centralised management
- Ease of deployment and configuration

SOLUTION

- 320 x ZoneFlex 7962 Dual Band 802.11n Access Points
- 2 x ZoneDirector 3000 WLAN Controllers

BENEFITS

- A wireless network capable of delivering data, voice and video at the speed of a wired environment
- Instant accessibility of up-to-the-minute patient records increases availability and effectiveness of bedside consultations
- Seamless roaming between buildings optimises treatment times for doctors
- Separate VLANs for staff, patients and guests delivers tiered wireless access securely and efficiently
- Adaptive antenna technology ensures interference avoidance and provides highest possible throughput levels
- Ease-of-use of ZoneDirector Controller plus self-configuring APs minimises administrative and maintenance overheads



"Visiting doctors are often amazed when they realise the whole hospital has wireless coverage, and I do hear them say it's as fast as a wired network."

Suresh Kumar

General Manager of IT
SevenHills Hospital

The user-friendly features of the Ruckus Zone Director management interface, coupled with the AP's plug-and-play functionality via Smart Mesh Networking, identified significant potential savings in time and resources to install and manage the hospital's WLAN.

Suresh comments, "I was very impressed that a network admin with only basic knowledge would be able to deploy and configure the APs so easily."

Since deploying a ZoneFlex smart Wi-Fi solution from Ruckus Wireless, SevenHills Hospital has been quick to capitalise on the opportunities to further enhance service efficiency and patient comfort levels at the facility.

Confident with what they deemed to be outstanding interference avoidance capabilities of the ZoneFlex APs, SevenHills Hospital went on to implement a raft of wirelessly delivered applications. Beyond the Electronic Medical Records system, some of the applications enabled wirelessly by Ruckus now include RFID, VoIP and Realtime Location Sensors.

In addition, the hospital is in the midst of rolling out a Pneumatic Tube System that will automatically fill medication orders prescribed by the doctors.

"Our investment in Ruckus Wireless has given the opportunity to exceed patient expectations in care and in comfort," states Suresh.

And for the doctors at SevenHills Hospital, seamless roaming throughout the hospital's 16 towers whilst accessing critical patient information on the fly makes their demanding roles less harried.

"Users of the Wi-Fi network are generally surprised at the capability of the service," advises Suresh. "Visiting doctors are often amazed when they realise the whole hospital has wireless coverage, and I do hear them say it's as fast as a wired network."

If the feedback from doctors is anything to go by, Suresh's goal of wirelessly delivering the hospital's information services at the speed of wire has certainly been achieved.